

# Notebook

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# Notebook

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## VISHAY components used for Notebook functions include:

- Power MOSFETS
- Controller ICs
- LDOs
- IrDA and IR Receiver Modules
- Load and Signal Switches
- Switching Diodes and Rectifiers
- Transient/Overvoltage Protection Devices
- ESD Protection Devices
- Capacitors
- Resistors
- NTC and PTC Thermistors
- Inductors/EMI Filters
- Secondary Protection Fuses

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## Application Overview

Notebook computer design is separated into two segments: Power and Hardware. The Power Segment involves hardware device power sources. For power sources, using a switching mode is an excellent way to improve converter efficiency. High current is its key feature. Power sources that use this technology include CPUs, DDR systems, chipsets, chargers, and VGA power sources. Low-dropout linear power is another solution for converter efficiency. Its main benefits are lower prices and simple circuitry. The Hardware Segment can be regarded as a non-power segment. Types of hardware include SD cards, USB ports, fingerprint recognition systems, remote controls, audio controls, touchscreens and touchpads, ambient light sensors, S-video ports, and wireless transmission systems such as IrDA® and Bluetooth®. Some of these need similar functions such as ESD protection, current limiting, and load switching. Different solutions based on different specifications are suggested.

## Notebook : Power Management, Charger Power

### Adaptor / Battery Switch

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4413ADY</a>	NEW	P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 20V	Low rDS(on) ID=15A; rDS(on)=0.0075Ω Qgd= 61nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4425BDY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 20V	VGS = ± 20V ID=-11.4A; rDS(on)=0.012Ω Qgd= 64nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4431BDY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 20V	VGS = ± 20V ID=-7.5A; rDS(on)=0.030Ω Qgd= 13nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4435BDY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 20V	VGS = ± 20V ID=-9.1A; rDS(on)=0.020Ω Qgd= 33nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4483EDY</a>		P-Channel 30-V (D-S) MOSFET With 3-kV ESD Protection VDS = -30V; VGS = ± 25V	High VGS = ± 25V ID=-14A; rDS(on)=0.0085Ω VGStH= -1.0 V;	SMD SO-8	
<a href="#">Si4825DY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 25V	High VGS = ± 25V ID=-11.5A; rDS(on)=0.014Ω Qg=15nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4835BDY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 25V	High VGS = ± 25V ID=-9.6A; rDS(on)=0.018Ω Qg=25nC; VGStH= -1 V;	SMD SO-8	
<a href="#">Si4890DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	High VGS = ± 25V ID=-11A; rDS(on)=0.012Ω Qg=14.2nC; VGStH=0.8 V;	SMD SO-8	
<a href="#">Si7459DP</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 25V Low Thermal Resistance PowerPAK®	Low rDS(on), high VGS ID=-22A; rDS(on)=0.0068Ω Qg= 113nC; VGStH= -1V	SMD PowerPAK SO-8	
<a href="#">Si7945DP</a>		Dual P-Channel 30-V (D-S) MOSFET VGS= ± 20V; TrenchFET® Power MOSFET	Low rDS(on); ID=-10.9A; rDS(on)=0.020Ω Qg= 49 nC; VGStH= -1 V	SMD PowerPAK SO-8	

### Dual Mofets

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4830 ADY</a>		Dual N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGStH= 1.4 V;	SMD SO-8	
<a href="#">Si4834BDY</a>		Dual N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGStH= 0.8 V;	SMD SO-8	
<a href="#">Si4914DY</a>		Dual N-Ch 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY; VDS = 30V; VGS = ± 20V	ID = 7 A / 7.4 A rDS(on)=0.032Ω / 0.027Ω Qgd=1.7 / 2.2nC; VGStH=1V	SMD SO-8	
<a href="#">Si4952DY</a>		Dual N-Channel 25-V (D-S) MOSFET DUAL VDS = 25V; VGS = ± 16V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGStH= 0.8 V;	SMD SO-8	

### High-Side MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4800BDY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET	High VGS = ± 25V ID=9A; rDS(on)=0.030Ω	SMD SO-8	

Product Name	Status	Description	Features	Package	Q-Level
		VDS = 30V; VGS = ± 25V High-Efficient PWM Optimized	Qgd= 3.5nC; VGSth= 0.8 V;		
<a href="#">Si4812BDY</a>		N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY With 1.4 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=9.5A; rDS(on)=0.021Ω Qgd= 2.6nC; VGSth= 1 V;	SMD SO-8	
<a href="#">Si4835BDY</a>		P-Channel 30-V (D-S) MOSFET VDS = -30V; VGS = ± 25V	High VGS = ± 25V ID=-9.6A; rDS(on)=0.018Ω Qg=25nC; VGSth= -1 V;	SMD SO-8	
<a href="#">Si7230DN</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V PWM Optimized	High power dissipation ID=14A; rDS(on)=0.016Ω Qgd= 4.3nC; VGSth= 1 V;	SMD PowerPAK 1212	
<a href="#">Si7326DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 20V	High power dissipation ID=10A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD PowerPAK 1212	

#### Inductors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">IHLP2525CZ-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded; Miniature Power	Profile height ≤ 3 mm 0.1 μH to 10 μH IDC up to 60 A	SMD 2525 7.3x7.3x3.0mm	
<a href="#">IHLP4040DZ-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 10 μH IDC up to 90 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP4040DZ-11</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 100 μH IDC up to 46 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP5050CE-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 3.5mm 0.1 μH to 10 μH IDC up to 84 A	SMD 5050 13.5x13.5x3.5mm	

#### Low Side MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4800BDY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 25V High-Efficient PWM Optimized	High VGS = ± 25V ID=9A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD SO-8	
<a href="#">Si4812BDY</a>		N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY With 1.4 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=9.5A; rDS(on)=0.021Ω Qgd= 2.6nC; VGSth= 1 V;	SMD SO-8	
<a href="#">Si7230DN</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V PWM Optimized	High power dissipation ID=14A; rDS(on)=0.016Ω Qgd= 4.3nC; VGSth= 1 V;	SMD PowerPAK 1212	
<a href="#">Si7326DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 20V	High power dissipation ID=10A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD PowerPAK 1212	

#### Resistors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">WSL2010-18</a>		1 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.001Ω to 0.5Ω TCR ≤ ± 75ppm	SMD 2010 5.08x2.54x0.635	
<a href="#">WSL2512-18</a>		2 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.0005Ω to 0.04Ω TCR ≤ ± 75ppm	SMD 2512 6.36x3.18x0.635	
<a href="#">WSLP1206</a>	NEW	1 Watt Power Metal Strip® Resistors;	High power & reliability	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		Very High Power- Small Size; Current Sensing;	R=0.001Ω to 0.05Ω P70 = 1W	1206 3.2x1.6x0.635mm	

### Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">B140</a>		Schottky Barrier Rectifier; Low Profile; Guardring for overload protection; High Surge Capabilities;	VRRM = 40 V; IF = 1 A, VF = 0.52 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B240 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; Low Profile	VRRM = 40 V; IF = 2 A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B340 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; RoHS-Compliant	VRRM = 40 V; IF = 3A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">MSS1P4</a>		Schottky Barrier Rectifiers SMD; #SMP# Series;	VRRM = 40 V; IF = 1 A; VF = 0.41 V;	SMD MicroSMP 2.7x1.4x0.75mm	
<a href="#">SS10P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	High power /small package VRRM = 40 V; IF = 10 A;VF = 0.384 V	SMD TO-277A (SMPC) 6.65x4.75x1.2mm	
<a href="#">SS1P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.4 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS2P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.43 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS3P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;#SMP# Series;	Small package VRRM = 40 V; IF = 3A, VF = 0.5 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS5P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;#SMP# Series;	High power /small package VRRM = 40 V; IF = 5 A, VF = 0.403 V,	SMD TO-277A (SMPC) 6.65x4.75x1.2mm	
<a href="#">SS8P4C</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;#SMP# Series; Dual Common-Cathode;	High power /small package VRRM = 40 V; IF = 8 A, VF = 0.42 V,	SMD TO-277A (SMPC) 6.65x4.75x1.2mm	
<a href="#">SSC54</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;	Small Outline VRRM = 40 V; IF = 5 A, VF = 0.36V,	SMD DO-220AA (SMC) 8.13x6.22x2.62mm	

### Signal Mosfet

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2N7002K</a>		N-Ch 60-V (D-S)MOSFET; 2KV ESD protected Low On-Resistance; Low Threshold; Low Input Capacitance; Fast Switch	VDS = 60 V; VGS = 20 V; rDS(on) = 4 Ohms, ID = 0.3A, VGStH = 1 V	SMD TO-236 (SOT-23)	

### Switch Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">1N4148WS-V</a>		Small Signal Fast Switching Diode; Silicon epitaxial planar diode; RoHS-Compliant;	VRRM = 75 V; IF = 0.15A; VF = 1.2 V;	SMD SOD323 2.85x1.5x1.15mm	
<a href="#">BAT54 A-V</a>		Small Signal Schottky Diodes; Single & Dual Schematics; Very Low Turn-On and Fast Switching	Dual, VRRM = 30 V; IF = 0.2 A, VF = 0.8 V,	SMD TO-236 (SOT-23) 3.0x2.5x1.1mm	Thin Pack

# Notebook : Power Management, CPU Power

## High-Side MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4386DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd; low rDS(on) ID=16A; rDS(on)=0.0095Ω Qgd = 3.0 nC;	SMD SO-8	
<a href="#">Si4392DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd ID=12.5A; rDS(on)=0.01375Ω Qgd = 2.6 nC;	SMD SO-8	
<a href="#">Si4682DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low Qgd ID=12A; rDS(on)=0.0135Ω Qgd = 3.1 nC;	SMD SO-8	
<a href="#">Si4684DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 12V	Low Qgd ID=12A; rDS(on)=0.0135Ω Qgd = 2.8 nC;	SMD SO-8	
<a href="#">Si4686DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Extremely Low Qgd WFET® Technology	Low Qgd ID=13.8A; rDS(on)=0.014Ω Qgd = 2.8 nC;	SMD SO-8	
<a href="#">Si7386DP</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd, low rDS(on) ID=19A; rDS(on)=0.0095Ω Qgd = 3.0 nC	SMD PowerPAK SO-8	
<a href="#">Si7392DP</a>		N-Ch. Reduced Qg, Fast Switching WFET® VDS = 30V; VGS = ± 20V	Low Qgd ID=15A; rDS(on)=0.01375Ω Qgd = 2.6 nC	SMD PowerPAK SO-8	
<a href="#">Si7682DP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V 100% Rg Tested	Low Qgd ID=17.5A; rDS(on)=0.013Ω Qgd = 3.1 nC;	SMD PowerPAK SO-8	
<a href="#">Si7686DP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Low Thermal Resistance PowerPAK®	Low Qgd ID=17.9A; rDS(on)= 0.014Ω Qgd = 2.8 nC;	SMD PowerPAK SO-8	
<a href="#">SUD50N03-10P</a>		N-Ch 30-V (D-S), 175°C, MOSFET; PWM Optimized; VDS = 30 V, VGS = ±20 V	ID=63A; rDS(on)=0.013Ω Qgd = 5 nC	SMD TO-252 DPAK	

## Inductors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">IHLP4040DZ-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 10 μH IDC up to 90 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP4040DZ-11</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 100 μH IDC up to 46 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP5050CE-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 3.5mm 0.1 μH to 10 μH IDC up to 84 A	SMD 5050 13.5x13.5x3.5mm	

## Low-Side MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4336DY</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=16.3A; rDS(on)=0.0067Ω VGSth = 1.0 V;	SMD SO-8	
<a href="#">Si4430BDY</a>		N-Channel 30-V MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=20A; rDS(on)=0.006Ω VGSth = 1.0 V;	SMD SO-8	
<a href="#">Si4634DY</a>	NEW	N-Channel 30-V (D-S) MOSFET	low rDS(on), high Vast	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		VDS = 30V; VGS = ± 20V	ID=16.3A; rDS(on)=0.0067Ω VGSth = 1.4 V;	SO-8	
<a href="#">Si4874BDY</a>	NEW	N-Channel 30-V MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=16A; rDS(on)=0.0085Ω VGSth = 1 V	SMD SO-8	
<a href="#">Si7336 ADP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Ultra Low (ON) Resistance;	Low rDS(on) ID=30A; rDS(on)=0.0040Ω VGSth = 1 V	SMD PowerPAK SO-8	
<a href="#">Si7634BDP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on), high Vast ID=23A; rDS(on)=0.0076Ω VGSth = 1.5 V	SMD PowerPAK SO-8	
<a href="#">Si7636DP</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Ultra Low (ON) Resistance	Low rDS(on) ID=28A; rDS(on)=0.0048Ω VGSth = 1 V	SMD PowerPAK SO-8	
<a href="#">SUD50N03-06 AP</a>		N-Channel 30-V (D-S) MOSFET Optimized for Low#Side Synch. Rectif. VDS = 30 V, VGS = ±20 V	Low rDS(on) ID=30A; rDS(on)=0.0078Ω VGSth = 1.2 V	SMD TO-252 DPAK	

### Resistors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">WSL2010-18</a>		1 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.001Ω to 0.5Ω TCR <= ± 75ppm	SMD 2010 5.08x2.54x0.635	
<a href="#">WSL2512-18</a>		2 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.0005Ω to 0.04Ω TCR <= ± 75ppm	SMD 2512 6.36x3.18x0.635	
<a href="#">WSLP1206</a>	NEW	1 Watt Power Metal Strip® Resistors; Very High Power- Small Size; Current Sensing;	High power & reliability R=0.001Ω to 0.05Ω P70 = 1W	SMD 1206 3.2x1.6x0.635mm	

### Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">B140</a>		Schottky Barrier Rectifier; Low Profile; Guardring for overload protection; High Surge Capabilities;	VRRM = 40 V; IF = 1 A, VF = 0.52 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B240 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; Low Profile	VRRM = 40 V; IF = 2 A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B340 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; RoHS-Compliant	VRRM = 40 V; IF = 3A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">MSS1P4</a>		Schottky Barrier Rectifiers SMD; #SMP# Series;	VRRM = 40 V; IF = 1 A; VF = 0.41 V;	SMD MicroSMP 2.7x1.4x0.75mm	
<a href="#">SS1P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.4 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS2P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.43 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS3P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;#SMP# Series;	Small package VRRM = 40 V;	SMD DO-220AA (SMP)	

Product Name	Status	Description	Features	Package	Q-Level
			IF = 3A, VF = 0.5 V,	4x2.18x1.15mm	

### Signal Switch

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2N7002K</a>		N-Ch 60-V (D-S)MOSFET; 2KV ESD protected Low On-Resistance; Low Threshold; Low Input Capacitance; Fast Switch	VDS = 60 V; VGS = 20 V; rDS(on) = 4 Ohms, ID = 0.3A, VGStH = 1 V	SMD TO-236 (SOT-23)	

### Switch Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">1N4148WS-V</a>		Small Signal Fast Switching Diode; Silicon epitaxial planar diode; RoHS-Compliant;	VRRM = 75 V; IF = 0.15A; VF = 1.2 V;	SMD SOD323 2.85x1.5x1.15mm	
<a href="#">BAT54 A-V</a>		Small Signal Schottky Diodes; Single & Dual Schematics; Very Low Turn-On and Fast Switching	Dual, VRRM = 30 V; IF = 0.2 A, VF = 0.8 V,	SMD TO-236 (SOT-23) 3.0x2.5x1.1mm	Thin Pack

### Thermistor NTC

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2381 615 1xxx</a>		NTC Thermistors; Surface Mount; TCR from 6 to 2% even at higher temp. RoHS-Compliant;	2 k $\Omega$ -470 k $\Omega$ ;B25/85Tol.=1% RTol.@25°C <= 5 %; Ptot = 0.21 W	SMD 0805 EIA-Sizes	
<a href="#">2381 615 3xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	2.2 k $\Omega$ to 100 k $\Omega$ ; 0.125 W RTol.@25°C = 5% to 1 %;	SMD 0603 EIA-Sizes	
<a href="#">2381 615 4xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	4.7 k $\Omega$ to 100 k $\Omega$ ; 0.125 W RTol.@25°C = 5% to 1 %;	SMD 0402 EIA-Sizes	
<a href="#">2381 615 5xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	2.2 k $\Omega$ to 680 k $\Omega$ , 0.21 W RTol.@25°C = 10% to 2 %;	SMD 0805 EIA-Sizes	
<a href="#">NTHS</a>		NTC Thermistors; Monolithic Construction	R25 = 1 k $\Omega$ to 330 k $\Omega$ Tol.@25°C = 10 % to 1% B(25/75) = 3181 to 4247	SMD 0402 to 1206 EIA-Sizes	

**Dual MOSFETs**

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4830 ADY</a>		Dual N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGSth= 1.4 V;	SMD SO-8	
<a href="#">Si4834BDY</a>		Dual N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGSth= 0.8 V;	SMD SO-8	
<a href="#">Si4914DY</a>		Dual N-Ch 30-V (D-S) MOSFET w. SCHOTTKY DUAL; With 2 A SCHOTTKY;	ID = 7 A / 7.4 A rDS(on)=0.032Ω / 0.027Ω Qgd=1.7 / 2.2nC; VGSth=1V	SMD SO-8	
<a href="#">Si4952DY</a>		Dual N-Channel 25-V (D-S) MOSFET DUAL VDS = 25V; VGS = ± 16V	VGS = ± 20V ID=7.5A; rDS(on)=0.030Ω Qgd= 2.5nC; VGSth= 0.8 V;	SMD SO-8	
<a href="#">Si7844DP</a>		Dual N-Channel 30-V (D-S) MOSFET; VGS= ± 20V; TrenchFET® Power MOSFET	High power dissipation; ID=10 A; rDS(on)= 0.030 Ω Qgd= 2.7nC; VGSth= 0.8 V;	SMD PowerPAK SO-8	

**High-Side MOSFETs**

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4386DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd, low rDS(on) ID=16A; rDS(on)=0.0095Ω Qgd = 3.0 nC;	SMD SO-8	
<a href="#">Si4392DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd ID=12.5A; rDS(on)=0.01375Ω Qgd = 2.6 nC;	SMD SO-8	
<a href="#">Si4682DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low Qgd ID=12A; rDS(on)=0.0135Ω Qgd = 3.1 nC;	SMD SO-8	
<a href="#">Si4684DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 12V	Low Qgd ID=12A; rDS(on)=0.0135Ω Qgd = 2.8 nC;	SMD SO-8	
<a href="#">Si4686DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Extremely Low Qgd WFET® Technology	Low Qgd ID=13.8A; rDS(on)=0.014Ω Qgd = 2.8 nC;	SMD SO-8	
<a href="#">Si4800BDY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 25V High-Efficient PWM Optimized	High VGS = ± 25V ID=9A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD SO-8	
<a href="#">Si4812BDY</a>		N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY With 1.4 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=9.5A; rDS(on)=0.021Ω Qgd= 2.6nC; VGSth= 1 V;	SMD SO-8	
<a href="#">Si4894BDY</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low Qgd ID=12A; rDS(on)=0.016Ω VGSth = 1 V	SMD SO-8	
<a href="#">Si7112DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 12V Small package;	low Qgd, low rDS(on) ID=17.8A; rDS(on)=0.0082Ω Qgd= 3.1nC; VGSth= 0.6 V;	SMD PowerPAK 1212	
<a href="#">Si7230DN</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V PWM Optimized	Small package ID=14A; rDS(on)=0.016Ω Qgd= 4.3nC; VGSth= 1 V;	SMD PowerPAK 1212	
<a href="#">Si7326DN</a>		N-Ch. 30-V (D-S) Fast Switching MOSFET	Small package	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		VDS = 30V; VGS = ± 20V	ID=10A; rDS(on)=0.030Ω Qgd= 3.5nC; VGStH= 0.8 V;	PowerPAK 1212	
<a href="#">Si7386DP</a>	NEW	N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd, low rDS(on) ID=19A; rDS(on)=0.0095Ω Qgd = 3.0 nC	SMD PowerPAK SO-8	
<a href="#">Si7392DP</a>		N-Ch. Reduced Qg, Fast Switching WFET® VDS = 30V; VGS = ± 20V	Low Qgd ID=15A; rDS(on)=0.01375Ω Qgd = 2.6 nC	SMD PowerPAK SO-8	
<a href="#">Si7682DP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V 100% Rg Tested	Low Qgd ID=17.5A; rDS(on)=0.013Ω Qgd = 3.1 nC;	SMD PowerPAK SO-8	
<a href="#">Si7686DP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Low Thermal Resistance PowerPAK®	Low Qgd ID=17.9A; rDS(on)= 0.014Ω Qgd = 2.8 nC;	SMD PowerPAK SO-8	

### Inductors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">IHLP1616BZ-01</a>	NEW	Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded; Ultra Miniature Power	Profile height ≤ 2 mm; 0.47 μH to 4.7 μH; IDC up to 12.8 A;	SMD 1616 4.8x4.8x2.0mm	
<a href="#">IHLP2525CZ-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded; Miniature Power	Profile height ≤ 3 mm 0.1 μH to 10 μH IDC up to 60 A	SMD 2525 7.3x7.3x3.0mm	
<a href="#">IHLP4040DZ-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 10 μH IDC up to 90 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP4040DZ-11</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 4mm 0.19 μH to 100 μH IDC up to 46 A	SMD 4040 11.5x11.5x4.0mm	
<a href="#">IHLP5050CE-01</a>		Inductor; High Current; Low Profile; Small Outline Package; Fully Shielded;	Profile height ≤ 3.5mm 0.1 μH to 10 μH IDC up to 84 A	SMD 5050 13.5x13.5x3.5mm	

### Low-Side MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4336DY</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=16.3A; rDS(on)=0.0067Ω VGStH = 1.0 V;	SMD SO-8	
<a href="#">Si4386DY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Low Qgd, low rDS(on) ID=16A; rDS(on)=0.0095Ω Qgd = 3.0 nC;	SMD SO-8	
<a href="#">Si4430BDY</a>		N-Channel 30-V MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=20A; rDS(on)=0.006Ω VGStH = 1.0 V;	SMD SO-8	
<a href="#">Si4634DY</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on), high Vast ID=16.3A; rDS(on)=0.0067Ω VGStH = 1.4 V;	SMD SO-8	
<a href="#">Si4682DY</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=12A; rDS(on)=0.0135Ω Qgd = 3.1 nC;	SMD SO-8	
<a href="#">Si4686DY</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Extremely Low Qgd WFET® Technology	VGS = ± 20V ID=13.8A; rDS(on)=0.014Ω Qgd = 2.8 nC;	SMD SO-8	

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si4800BDY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 25V High-Efficient PWM Optimized	High VGS = ± 25V ID=9A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD SO-8	
<a href="#">Si4812BDY</a>		N-Ch. 30-V (D-S) MOSFET w. SCHOTTKY With 1.4 A SCHOTTKY; VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=9.5A; rDS(on)=0.021Ω Qgd= 2.6nC; VGSth= 1 V;	SMD SO-8	
<a href="#">Si4874BDY</a>	NEW	N-Channel 30-V MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on) ID=16A; rDS(on)=0.0085Ω VGSth = 1 V	SMD SO-8	
<a href="#">Si7112DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 12V Small package;	low Qgd, low rDS(on) ID=17.8A; rDS(on)=0.0082Ω Qgd= 3.1nC; VGSth= 0.6 V;	SMD PowerPAK 1212	
<a href="#">Si7114DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 20V TrenchFET® Gen II Power MOSFET	Small package ID=18.3A; rDS(on)=0.010Ω Qgd= 3.6nC; VGSth= 1 V;	SMD PowerPAK 1212	
<a href="#">Si7230DN</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V PWM Optimized	Small package ID=14A; rDS(on)=0.016Ω Qgd= 4.3nC; VGSth= 1 V;	SMD PowerPAK 1212	
<a href="#">Si7326DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 20V	Small package ID=10A; rDS(on)=0.030Ω Qgd= 3.5nC; VGSth= 0.8 V;	SMD PowerPAK 1212	
<a href="#">Si7336 ADP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Ultra Low (ON) Resistance;	Low rDS(on) ID=30A; rDS(on)=0.0040Ω VGSth = 1 V	SMD PowerPAK SO-8	
<a href="#">Si7634BDP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	Low rDS(on), high Vast ID=23A; rDS(on)=0.0076Ω VGSth = 1.5 V	SMD PowerPAK SO-8	
<a href="#">Si7636DP</a>	NEW	N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V Ultra Low (ON) Resistance	Low rDS(on) ID=28A; rDS(on)=0.0048Ω VGSth = 1 V	SMD PowerPAK SO-8	

#### Resistors

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">WSL2010-18</a>		1 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.001Ω to 0.5Ω TCR <= ± 75ppm	SMD 2010 5.08x2.54x0.635	
<a href="#">WSL2512-18</a>		2 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.0005Ω to 0.04Ω TCR <= ± 75ppm	SMD 2512 6.36x3.18x0.635	
<a href="#">WSLP1206</a>	NEW	1 Watt Power Metal Strip® Resistors; Very High Power- Small Size; Current Sensing;	High power & reliability R=0.001Ω to 0.05Ω P70 = 1W	SMD 1206 3.2x1.6x0.635mm	

#### Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">B140</a>		Schottky Barrier Rectifier; Low Profile; Guardring for overload protection; High Surge Capabilities;	VRRM = 40 V; IF = 1 A, VF = 0.52 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B240 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; Low Profile	VRRM = 40 V; IF = 2 A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">B340 A</a>		High-Current Density Schottky Rectifier High Efficiency; Low Power Loss; RoHS-Compliant	VRRM = 40 V; IF = 3A, VF = 0.5 V,	SMD DO-214AC (SMA) 5.28x2.8x2.3mm	
<a href="#">MSS1P4</a>		Schottky Barrier Rectifiers	VRRM = 40 V;	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		SMD; #SMP# Series;	IF = 1 A; VF = 0.41 V;	MicroSMP 2.7x1.4x0.75mm	
<a href="#">SS1P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.4 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS2P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density; #SMP# Series;	Small package VRRM = 40 V; IF = 2 A, VF = 0.43 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	
<a href="#">SS3P4</a>	NEW	Schottky Barrier Rectifiers; SMD; High Current Density;#SMP# Series;	Small package VRRM = 40 V; IF = 3A, VF = 0.5 V,	SMD DO-220AA (SMP) 4x2.18x1.15mm	

#### Small-Signal MOSFET

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2N7002K</a>		N-Ch 60-V (D-S)MOSFET; 2KV ESD protected Low On-Resistance; Low Threshold; Low Input Capacitance; Fast Switch	VDS = 60 V; VGS = 20 V; rDS(on) = 4 Ohms, ID = 0.3A, VGStH = 1 V	SMD TO-236 (SOT-23)	

#### Switch Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">1N4148WS-V</a>		Small Signal Fast Switching Diode; Silicon epitaxial planar diode; RoHS-Compliant;	VRRM = 75 V; IF = 0.15A; VF = 1.2 V;	SMD SOD323 2.85x1.5x1.15mm	
<a href="#">BAT54 A-V</a>		Small Signal Schottky Diodes; Single & Dual Schematics; Very Low Turn-On and Fast Switching	Dual, VRRM = 30 V; IF = 0.2 A, VF = 0.8 V,	SMD TO-236 (SOT-23) 3.0x2.5x1.1mm	Thin Pack

## Notebook : System Hardware, Load Switch

### Level Shift

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">Si1865DL</a>	NEW	Load Switch with Level-Shift; With 2-kV ESD Protection Low Profile; Small Footprint	VDS = 8 V; ID=1.2A; rDS(on)=0.215Ω; Von/off = 8 V;	SMD SC-70	
<a href="#">Si3865BDV</a>		Load Switch with Level-Shift; With 3-kV ESD Protection;1.8 Volt Rated; VDS = 8V	Lower turn-on at 1.8 V ID=2.9A; rDS(on)=0.060Ω; Von/off = 8 V,	SMD TSOP-6	

### MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2N7002K</a>		N-Ch 60-V (D-S)MOSFET; 2KV ESD protected Low On-Resistance; Low Threshold; Low Input Capacitance; Fast Switch	VDS = 60 V; VGS = 20 V; rDS(on) = 4 Ohms, ID = 0.3A, VGStH = 1 V	SMD TO-236 (SOT-23)	
<a href="#">Si3424DV</a>		N-Channel 30-V (D-S) MOSFET TrenchFET® Power MOSFETS	VGS = ± 20V ID=6.7A; rDS(on)=0.038Ω; Qgd= 11.5nC; VGStH= 0.8V;	SMD TSOP-6	
<a href="#">Si3433BDC</a>		P-Channel 1.8-V (G-S) MOSFET TrenchFET® Power MOSFETS	VGS = ± 8V ID=5.6A; rDS(on)=0.042Ω; Qgd= 12nC; VGStH= 0.45 V;	SMD TSOP-6	
<a href="#">Si3442BDV</a>		N-Channel 2.5-V (G-S) MOSFET VDS = 20V; VGS = ± 12V	VGS = ± 12V ID=4.2A; rDS(on)=0.090Ω; Qgd= 3.0nC; VGStH= 0.6 V;	SMD TSOP-6	
<a href="#">Si3456BDV</a>		N-Channel 30-V (D-S) MOSFET VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=6A; rDS(on)=0.052Ω; Qgd= 8.6nC; VGStH= 1 V;	SMD TSOP-6	
<a href="#">Si4800BDY</a>		N-Ch. Reduced Qg, Fast Switching MOSFET VDS = 30V; VGS = ± 25V High-Efficient PWM Optimized	High VGS = ± 25V ID=9A; rDS(on)=0.030Ω Qgd= 3.5nC; VGStH= 0.8 V;	SMD SO-8	
<a href="#">Si7326DN</a>	NEW	N-Ch. 30-V (D-S) Fast Switching MOSFET VDS = 30V; VGS = ± 20V	VGS = ± 20V ID=10A; rDS(on)=0.030Ω Qgd= 3.5nC; VGStH= 0.8 V;	SMD PowerPAK 1212	
<a href="#">TP0610K</a>		P-Channel 60-V (D-S) MOSFET With 2-kV ESD Protection; VDS = 60 V, VGS = 20 V,	ID=0.185A; rDS(on)=10Ω VGStH = 1 V	SMD SOT-23	

## Notebook : System Hardware, Opto Sensor

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### Ambient Light Sensor

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">TEMT6000X01</a>	NEW	NPN Phototransistor; Ambient Light Sensor;		SMD 4.0x2.0x1.05mm	
<a href="#">TEMT6200FX01</a>	NEW	NPN Phototransistor; Ambient Light Sensor;		SMD 0805 EIA-Sizes	

## Notebook : System Hardware, Protection

### Diodes

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">1N4148WS-V</a>		Small Signal Fast Switching Diode; Silicon epitaxial planar diode; RoHS-Compliant;	VRRM = 75 V; IF = 0.15A; VF = 1.2 V;	SMD SOD323 2.85x1.5x1.15mm	
<a href="#">BAT54 A-V</a>		Small Signal Schottky Diodes; Single & Dual Schematics; Very Low Turn-On and Fast Switching	Dual, VRRM = 30 V; IF = 0.2 A, VF = 0.8 V,	SMD TO-236 (SOT-23) 3.0x2.5x1.1mm	Thin Pack
<a href="#">BAV99-V</a>		Small Signal Switching Diode, Dual	Dual; VRRM = 70 V, IF = 0.2A; VF = 0.715 V	SMD SOT-23	

### EMI

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">ILHB series</a>		Ferrite beads@100MHz; High Current; EIA-Size = 0603/0805/1206/1812	High current current 2 A to 3 A DCR = 0.1~0.05 ohms,	SMD 0402 to 1206 EIA-Sizes	

### Fuse

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">MFU0603</a>	NEW	Fuses, Thin Film; Fast Acting; 0603; Stable Fusing Characteristics;	IR = 0.5 A to 5.0 A; UDCmax = 32 V	SMD 0603 EIA-Sizes	
<a href="#">MFU0805</a>	NEW	Fuses, Thin Film; Fast Acting; 0805; Stable Fusing Characteristics;	IR = 0.5 A to 5.0 A; UDCmax = 32 V	SMD 0805 EIA-Sizes	

### Thermister NTC

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">2381 615 1xxx</a>		NTC Thermistors; Surface Mount; TCR from 6 to 2% even at higher temp. RoHS-Compliant;	2 k $\Omega$ -470 k $\Omega$ ;B25/85Tol.=1% Rtol.@25°C <= 5 %; Ptot = 0.21 W	SMD 0805 EIA-Sizes	
<a href="#">2381 615 3xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	2.2 k $\Omega$ to 100 k $\Omega$ ; 0.125 W RTol.@25°C = 5% to 1 %;	SMD 0603 EIA-Sizes	
<a href="#">2381 615 4xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	4.7 k $\Omega$ to 100 k $\Omega$ ; 0.125 W RTol.@25°C = 5% to 1 %;	SMD 0402 EIA-Sizes	
<a href="#">2381 615 5xxx</a>		NTC Thermistors; Surface Mount; Tolerance on B25/85 down to 1 %	2.2 k $\Omega$ to 680 k $\Omega$ , 0.21 W RTol.@25°C = 10% to 2 %;	SMD 0805 EIA-Sizes	
<a href="#">NTHS</a>		NTC Thermistors; Monolithic Construction	R25 = 1 k $\Omega$ to 330 k $\Omega$ Tol.@25°C = 10 % to 1% B(25/75) = 3181 to 4247	SMD 0402 to 1206 EIA-Sizes	

### Thermister PTC

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">TFPT</a>		PTC Thermistors; Linear; Thin Film; SMD; EIA 0603/0805/1206;	TCR@25°C= 4110ppm TCR Tol.= $\pm$ 400ppm	SMD 0603 to 1206 EIA-Size	

### TVS

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">TPSMP series</a>		Transient Voltage Suppressor High Power Density; SMD; Automotive Qualified	Small package 400 W, up to 30 A, VF = 2.5 V,	SMD SMP 4x2.18x1.15mm	AEC Q-101

### Zener

Product Name	Status	Description	Features	Package	Q-Level
<a href="#">BZX384 series</a>		Silicon Planar Power Zener Diodes;	0.2 Watt	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		Miniature;	Zvoltage Tol. ≤ 5%	SOD323 2.85x1.5x1.15mm	