

Inkjet Printer

Table of Contents

Access Sensors, Door Sensor.....	3
Control Board, DSP Logic.....	4
Control Board, Ink Motor Drive.....	6
Control Board, Print Head.....	7
Image and Drop Sensors, Index Sensor.....	8
Interface / Peripherals, General Purpose.....	9
Media and Position Sensors, Pen Alignment/Color Detection Sensor.....	10
Media and Position Sensors, Pen Alignment/Color Detection/Paper Detection Sensor.....	11
Media and Position Sensors, Pen Alignment/Paper Detection Sensor.....	12
Power Supply, Buck Capacitance.....	13
Power Supply, EMI Filtering.....	14
Power Supply, Feedback Loop.....	15
Power Supply, Input Rectifier.....	16
Power Supply, Output Filter.....	17
Power Supply, Output Rectifier.....	18
Power Supply, PFC.....	19
Power Supply, PWM.....	20
Power Supply, Snubber.....	21

Inkjet Printer

VISHAY components used inkjet printers include:

- Power MOSFETS
- Opto Sensors and Couplers
- Schottky Devices
- Ultrafast Rectifiers
- Zener Diodes
- Switching Diodes
- High-Voltage Resistors
- Inductors/EMI Filters
- ESD Diodes

Application Overview

Inkjet printers operate by propelling variably-sized droplets of liquid or molten material onto almost any printable material. They are the most common type of computer and consumer printer due to their low cost, high quality of output, capability of printing in vivid color, and ease of use. There are three main technologies used in contemporary inkjet printers: thermal, piezoelectric, and continuous. Desktop inkjet printers, as used in offices or at home, all use aqueous inks. These inks are inexpensive to manufacture, but are difficult to control on the surface of media, often requiring specially coated media and sensors to control the quality and position of them. Inkjets can print finer, smoother details through higher print head resolution, and consumer inkjets with photographic-quality printing are widely available. Inkjets have the advantages of practically no warm-up time and lower cost per page. To keep overall printing costs low, efficient power supplies and intelligent power management such as fast wake-up and auto-power-off are essential.

Inkjet Printer : Access Sensors, Door Sensor

IR LED

Product Name	Status	Description	Features	Package	Q-Level
TSML1000		High-Power SMD IRED GaAIAs/GaAs	Half Intensity Angle= $\pm 12^\circ$ $\lambda_p = 950 \text{ nm}$. 5V/0.1A, $V_f = 1.2 \text{ V}$	Custom	

Inkjet Printer : Control Board, DSP Logic

External Port Current Cut-Off Circuit

Product Name	Status	Description	Features	Package	Q-Level
SI1869DH-T1-E3		Load Switch with Level Shifter for USB Port	P+N Channel MOSFET, Id up to 1.2 A, rDSon 0.165 Ω@Vin = 4.5 V	SMD SC70-6	

Filter Capacitor

Product Name	Status	Description	Features	Package	Q-Level
VJ...W1BC		MLCC Capacitor, SMD	MLCC Ceramic Capacitors	SMD 0603 to 0805 EIA Size	

Noise Filtering

Product Name	Status	Description	Features	Package	Q-Level
ICM0805ER900M		Surface-Mount Common Mode Choke	Impedance 90 ohm@100MHz, 50-V/0.33-A Rated Current	SMD Size 0805	
ILHB0805RK601V		High-Current Multilayer Ferrite Beads	Impedance 600 ohm@100MHz, Rated Current 2 A, DC resistance 0.1 ohm	SMD Size 0805	

Schottky Diode

Product Name	Status	Description	Features	Package	Q-Level
B160-E3	NEW	Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	60 V/1 A	SMD SMA	
RS1J-E3/61T		Fast-Switching Rectifier	600 V/1 A	SMD SMA	
S1G-E3		Glass Passivated Rectifier General Purpose Application	400 V/1 A	SMD SMA	
SS16-E3		Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	60 V/1 A	SMD SMA	
SS24-E3		Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	40 V/2 A	SMD SMB	
SS26-E3		Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	60 V/2 A	SMD SMB	
SS26S-E3	NEW	Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	60 V/2 A	SMD SMA	
SS2P4-E3	NEW	SMP Package, Low Vf, Low Leakage Current	40 V/2 A	SMD SMP	
SS33-E3		Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	30 V/3 A	SMD SMC	
SS34-E3		Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	40 V/3 A	SMD SMC	
SS3P3L-E3	NEW	Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current SMPC Package	30 V/3 A	SMD SMPC	
SS3P4-E3	NEW	SMP Package, Low Vf, Low Leakage Current	40 V/3 A	SMD SMP	
SS3P4L-E3	NEW	Schottky Barrier Rectifier, SMD,	40 V/3 A	SMD	

Product Name	Status	Description	Features	Package	Q-Level
		Low Vf, Low Leakage Current SMPC Package		SMPC	

Small-Signal MOSFET

Product Name	Status	Description	Features	Package	Q-Level
2N7002E-E3		N-Channel Small-Signal Switching MOSFET	60V/0.24A. Rdson=1.2ohm, Qg = 0.4 Nc	SMD SOT-23	
2N7002K-E3	NEW	N-Channel Small-Signal Switching MOSFET	60V/0.3A. Rdson=1ohm, Qg = 0.4 nC	SMD SOT-23	

Small-Signal Schottky Diode

Product Name	Status	Description	Features	Package	Q-Level
BAS40-00-V		Small-Signal Schottky Diode	Single Schottky Diode, 40V/0.2A with Vf = 0.38 V	SMD SOT-23	

Thick Film Resistor

Product Name	Status	Description	Features	Package	Q-Level
CRA series		Thick Film Chip Resistor Array, SMD	R = 1 Ω to 10 M Ω ; Tol = 1% and 5%; TCR = 100...200 ppm	SMD 0402 to 2512 EIA Size	
CRCW...E3		Thick Film Chip Resistor, SMD	R = 1 Ω to 10 M Ω ; Tol = 1% and 5%; TCR = 100...200 ppm	SMD 0201 to 2512 EIA Size	

Zener Diode

Product Name	Status	Description	Features	Package	Q-Level
BZG04-47-M		Zener Diode with Surge Current Specification	3-W Zener Diode at 47 V Standoff Voltage and Clamping at 78.6 V	SMD DO214AC	
BZX84C10-V-GS08		300-mW Small-Signal Zener Diode	9.4-10.6 V Zener voltage, 5% Tolerance, Leakage Current 0.2 uA	SMD SOT-23	
BZX84C3V6-V-GS08		300-mW Small-Signal Zener Diode	3.4-3.8 V Zener voltage, 5% Tolerance, Leakage Current 0.5 uA	SMD SOT-23	
BZX84C8V2-V-GS08		300-mW Small-Signal Zener Diode	7.7-8.7 V Zener voltage, 5% Tolerance, Leakage Current 0.7 uA	SMD SOT-23	

Inkjet Printer : Control Board, Ink Motor Drive

Driver Switch

Product Name	Status	Description	Features	Package	Q-Level
MSS1P6-E3	NEW	Schottky Barrier Rectifier, SMD, Low Vf, Low Leakage Current Small Package	60 V/1 A	SMD uSMP	

Freewheeling Diode Due to Induction Load

Product Name	Status	Description	Features	Package	Q-Level
Si2318CDS	NEW	N-Channel 40V (D-S) MOSFET	Rdson=0.042ohm, ID=5.6A	SMD SOT-23	

Inkjet Printer : Control Board, Print Head

Voltage Calibration MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
Si3460DDV		N-Channel 20V (D-S) MOSFET	Rdson=0.028ohm, ID=7.9A; VGX=4.5V; Qg (Typ.)= 6.7nC	SMD TSOP-6	
SI4840BDY-T1-E3		N-Channel Switching MOSFET	40 V/14 A (10sec) ID = 10A (steady state). rDSon=7.5mohm, Qg=18.5nC	SMD SO-8	
SI7848BDP-T1-E3		N-Channel Switching MOSFET	40V/47A, Rdson=7.4mohm, Qg = 33nC	SMD PPAK SO-8	
SI7850DP-T1-E3		N-Channel Switching MOSFET	60V/10A, Rdson=0.018ohm, Qg = 18nC	SMD PPAK SO-8	
SIE832DF-T1-E3		N-Channel Switching MOSFET	40V/50A, Rdson=4.6mohm, Qg = 51nC	SMD PolarPAK	
SUD50N04-16P-E3		N-Channel Switching MOSFET	40V/10A, Rdson=0.0125ohm, Qg = 39nC	SMD TO-252	
SUD50N06-36-E3		N-Channel Switching MOSFET	60V/6A, Rdson=0.028ohm, Qg = 21nC	SMD TO-252	

Inkjet Printer : Image and Drop Sensors, Index Sensor

Standard Index Sensor

Product Name	Status	Description	Features	Package	Q-Level
TCST1202		Transmissive Optical Sensor with Phototransistor Output ton = 10 us, toff = 8 us.	11.9x6.3x10.8mm,Gap:3.1mm E:Vr=6V, If=60mA,Vf=1.25V D: Vceo = 70V, Ic = 100mA	Custom	
TCST5250		Transmissive Optical Sensor with Phototransistor Output ton = 15 us, toff = 8 us.	14.3x6x9.5mm;Gap:2.7mm E:Vr=6V, If=60mA,Vf=1.25V D: Vceo = 70V, Ic = 100mA	Custom	

Inkjet Printer : Interface / Peripherals, General Purpose

ESD Protection

Product Name	Status	Description	Features	Package	Q-Level
GSOT03C		2-Line ESD Protection	Ipp = 30A and Ppp = 369W, 30-KV ESD Immunity	SMD SOT-23	
VBUS052BD-HTF		2-Line ESD Protection	Ipp = 3A, Ppp = 45W, 15-KV ESD Immunity	SMD LLP75-3L	
VESD05A8A-HNH		8-Line ESD Protection Diode Array	Ipp=5A, Ppp = 65W, 30-KV ESD Immunity	SMD LLP1713-9L	

Inkjet Printer : Media and Position Sensors, Pen Alignment/Color Detection Sensor

Pen Alignment and Color Detection

Product Name	Status	Description	Features	Package	Q-Level
K783P	SOON	Reflective Optical Sensor, Pen Alignment and Color Detection and EEPROM for Calibration Data Storage		Custom	

Inkjet Printer : Media and Position Sensors, Pen Alignment/Color Detection/Paper Detection Sensor

Pen Alignment / Color Detection/ Media Detection

Product Name	Status	Description	Features	Package	Q-Level
K784P	SOON	Reflective Optical Sensor, Pen Alignment Media Detection (2-Ch), Color Detection EEPROM for Calibration Data Storage		Custom	

Inkjet Printer : Media and Position Sensors, Pen Alignment/Paper Detection Sensor

Pen Alignment and Media Detection

Product Name	Status	Description	Features	Package	Q-Level
K797P	SOON	Reflective Optical Sensor, Pen Alignment Media Detection, Short Media Distance ~3 mm		Custom	

Inkjet Printer : Power Supply, Buck Capacitance

Snap-In Aluminum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
152RMH		Aluminum Capacitors; Radial; Miniature; High Voltage	1.0-220 μ F; Vr=200-450V; Temp. Range= -40 -+105°C; Life@105 °C = 3000h-4000h	TH / Radial 10x12 to 18x35mm	

Inkjet Printer : Power Supply, EMI Filtering

X Capacitor

Product Name	Status	Description	Features	Package	Q-Level
MKP339		Interference Suppression Film Capacitors MKP Radial Potted Type	X2-Class; 0.001 to 4.7 μ F AC 275 V; DC 630 V; Temp = 110 °C;	TH / Radial 7.5-27.5mm Pitch Radial	UL EN CAS

Y Capacitor

Product Name	Status	Description	Features	Package	Q-Level
YY1		Ceramic Disc Capacitors; Y Capacitor; Safety-Standard-Approved Disc Capacitor;	C = 10 pF to 4700 pF; (Y1): 500 V (AC), 50 Hz; Temp=- 40 °C to + 125 °C;	TH / Radial 10-mm Lead Pitch	
YY2		Ceramic Disc Capacitors; Y Capacitor; Safety-Standard-Approved Disc Capacitor;	C = 10 pF to 0.01 μ F; (Y2): 300 V (AC), 50 Hz; Temp=- 40 °C to + 125 °C;	TH / Radial 5-10 mm Pitch	

Inkjet Printer : Power Supply, Feedback Loop

Current Sense Resistor

Product Name	Status	Description	Features	Package	Q-Level
WSL2010		1/2 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	
WSL2512		1 Watt Current sensing Resistor Power Metal Strip® Resistors; Low Resistance Value;	High power & reliability R=0.0005Ω to 0.5Ω TCR ? ± 75ppm	SMD 2512 6.36x3.18x0.635	
WSLP1206		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	

Load Switch

Product Name	Status	Description	Features	Package	Q-Level
Si4447DY-T1-E3		P-Channel Load Switching MOSFET	40V/4.5A, Rdson=0.045ohm, Qg = 9 nC	SMD SO-8	
Si6459BDQ-T1-E3		P-Channel Load Switching MOSFET	60V/2.7A, Rdson=0.092ohm, Qg = 14.5 nC	SMD TSSOP-8	
Si7309DN-T1-E3		P-Channel Load Switching MOSFET	60V/8A, Rdson=0.092ohm, Qg = 14.5 nC	SMD PPAK 1212-8	
SUD19P06-60-E3		P-Channel Load Switching MOSFET	60V/19A, Rdson=0.048ohm. Qg = 26 nC	SMD TO-252	

Optocoupler

Product Name	Status	Description	Features	Package	Q-Level
SFH617A		Optocoupler; Phototransistor Output; High Reliability;	VISO = 5300 VRMS; Tamb: -55 to +110 °C; CTR: 40 to 320%	TH / DIP DIP4	
SFH690CT		Optocoupler; Phototransistor Output;	VISO = 3750 VRMS; Tamb: -55 to +100 °C; CTR: 50 to 400%	SMD SOP-4	CSA 93751 UL1577 BSI
TCET1104		Optocoupler; Phototransistor Output; High-Temperature-Capable;	VISO = 5000 VRMS; Tamb: -40 to +100 °C; CTR: 50 to 600%	TH / DIP DIP4	
TCET1114		Optocoupler; Phototransistor Output; High-Temperature-Capable;	VISO = 5000 VRMS; Tamb: -40 to +100 °C; CTR: 50 to 600%	TH / DIP DIP4	

Switch Diode

Product Name	Status	Description	Features	Package	Q-Level
1N4007		General Purpose Plastic Rectifier	IF(AV):1.0 A; Vrrm = 50V-1000V; IFSM = 30 A; VF = 1.1 V;	TH / Axial DO-204AL (DO-41)	

Zener Diode

Product Name	Status	Description	Features	Package	Q-Level
BZX384		Small-Signal Zener Diodes	Vz = 2.4 V to 75 V; Ptot = 200 mW; Tj max = 150 °C;	SMD SOD323 Plastic Case	
TLZ		Small-Signal Zener Diodes	Vz: = 2.4 V to 56 V Ptot = 500 mW; Tj max = 175 °C	SMD SOD80 MiniMELF	
TZX		Small-Signal Zener Diodes	Vz: = 2.4 V to 36 V Ptot = 500 mW; Tj max = 175 °C	TH / Axial DO-35 Glass Case	

Inkjet Printer : Power Supply, Input Rectifier

Bridge Rectifier

Product Name	Status	Description	Features	Package	Q-Level
DF06MA		Single-Phase Bridge Rectifiers; Miniature; Glass Passivated;	IF(av) = 1 A; Vf = 1.1 V; Vrrm=50V-1000V;Ifsm=30A Tj max = 150°C;	TH / DIP DFM	
GBL06		Single-Phase Bridge Rectifiers; Glass Passivated;	IF(av) = 4 A; Vf = 1 V; Vrrm=50V-1000V;Ifsm=150A Tjmax = 150 °C;	TH / SIP GBL	
GBLA06		Single-Phase Bridge Rectifiers; Glass Passivated;	IF(av) = 4 A; Vf = 1 V; Vrrm=50V-1000V;Ifsm=120A Tjmax=150 °C;	TH / SIP GBL	
GBU6J		Single-Phase Bridge Rectifiers; Glass Passivated;	IF(av) = 6 A; Vf = 1 V; Vrrm=50V-1000V;Ifsm=175A Tjmax = 150 °C;	TH / SIP GBU	
GBU8J		Single-Phase Bridge Rectifiers; Glass Passivated;	IF(av) = 8 A; Vf = 1 V; Vrrm=50V-1000V;Ifsm=200A Tjmax = 150 °C;	TH / SIP GBU	
VS-2KBP06M		Single-Phase Bridge Rectifiers; Glass Passivated; Tjmax = 165 °C;	IF(AV): = 2 A; Vrrm = 50 V-1000 V; IFSM = 60 A;Vf = 1.1 V;	TH / SIP KBPM	

Inkjet Printer : Power Supply, Output Filter

Aluminum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
038RSU		Radial Standard Miniature;	6,3 V to 100 V 0,1 μ F to 22000 μ F Life at 85 °C = 3500 h	TH / Radial 5x11 to 18x40m	
136RVI		Radial; Very Low Impedance;	10 V to 100 V 22 μ F to 10000 μ F Life@105°C=4000-10000h	TH / Radial 10x12 to 18x35	
142RHS		Radial; Standard Miniature;	10 V to 450 V 1 μ F to 10000 μ F Life@105°C= 2500h	TH / Radial max 18x40mm	
152 RMH		Radial Miniature; High Voltage	200 V to 450 V 1,5 μ F to 220 μ F Life@105 °C= 3000-4000h	TH / Radial 10x12 to 18x35	AEC Q200

Inkjet Printer : Power Supply, Output Rectifier

Low-Voltage MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SUP40N10-30		N-Channel 100-V (D-S) 175 °C MOSFET	Vdss = 100 V; ID=40A; rDS(on)=0.030Ω Qg = 35nC;	TH / Radial TO-220AB	
SUP90N10-8m8P	NEW	N-Channel 100-V (D-S) 175 °C MOSFET	Vdss = 100 V; ID=90A; rDS(on)=0.008Ω	TH / Radial TO-220AB	

Schottky

Product Name	Status	Description	Features	Package	Q-Level
V20100C		Trench MOS Barrier Schottky Rectifier; Dual; High Voltage	IF(AV)=2 x 10A; VF=0.58V; Vrrm = 100 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	
V20100C		Trench MOS Barrier Schottky Rectifier; Dual; High Voltage	IF(AV)=2 x 10A; VF=0.58V; Vrrm = 100 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	
V20100SG		Trench MOS Barrier Schottky Rectifier; High Voltage	IF(AV)=20 A; VF=0.75V; Vrrm = 100 V; Tj max = 150 °C;	TH / Radial TO-220AB; TO-262AA	
V20120C	NEW	Trench MOS Barrier Schottky Rectifier; Dual; High Voltage	IF(AV)=2 x 10A; VF=0.61V; Vrrm = 120 V; Tj max = 150 °C;	TH / Radial TO-220AB	
V20120SG		Trench MOS Barrier Schottky Rectifier; High Voltage	IF(AV)=20 A; VF=0.77V; Vrrm = 120 V; Tj max = 150 °C;	TH / Radial TO-220AB; ITO-220AB	
V30100C		Trench MOS Barrier Schottky Rectifier; Dual; High Voltage	IF(AV)=2 x 15A;VF=0.627V; Vrrm = 100 V; Tj max = 150 °C;	TH / Radial TO-220AB	
V30100SG		Trench MOS Barrier Schottky Rectifier; High Voltage	IF(AV)=30 A; VF=0.757V; Vrrm = 100 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	
V30120C	NEW	Trench MOS Barrier Schottky Rectifier; High Voltage	IF(AV)=30 A; VF=0.7V; Vrrm = 120 V; Tj max = 150 °C;	TH / Radial TO-220AB; TO-262AA	
V30120SG	NEW	Trench MOS Barrier Schottky Rectifier; High Voltage	IF(AV)=30 A; VF=0.712V; Vrrm = 120 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	
V40100G		Trench MOS Barrier Schottky Rectifier; Dual High Voltage	IF(AV)=2 x 20A;VF=0.67V; Vrrm = 100 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	
V40120C	NEW	Trench MOS Barrier Schottky Rectifier; Dual; High Voltage	IF(AV)=2 x 20A;VF=0.630V; Vrrm = 120 V; Tj max = 150 °C;	SMD TO-263AB D2PAK	

Inkjet Printer : Power Supply, PFC

600-V Ultrafast Diode

Product Name	Status	Description	Features	Package	Q-Level
MUR460		Ultrafast Plastic Rectifier	IF(av) = 4 A; Vf = 1.05V; Vrrm=400V to 600V; Trr=50ns; Tj max.=175 °C;	TH / Axial DO-201AD	

General Rectifier

Product Name	Status	Description	Features	Package	Q-Level
1N5406		General-purpose Plastic Rectifier; Tj max = 150 °C;	IF(AV): = 3A; Vrrm = 50V-1000V; IFSM = 200 A;Vf = 1.2 V;	TH / Axial DO-201AD	

High-Voltage Resistor

Product Name	Status	Description	Features	Package	Q-Level
VR25		High-Ohmic/High-Voltage Resistors	High Pulse Loading Cap.; Small Size	TH / Axial 0207 A5;A2;A1;R5;N4	

Inkjet Printer : Power Supply, PWM

High-Voltage MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
IRFBE30PBF		SMPS MOSFET; HEXFET® Power MOSFET; Fast Switching; Low $r_{DS(on)}$; Cost Eff. Low Thermal Resistance;	$V_{dss} = 900\text{ V}$; $I_D = 3.6\text{ A}$; $r_{DS(on)} = 3.7\Omega$; $Q_g = 78\text{ nC}$;	TH / Radial TO-220AB	
IRFBF30PBF		SMPS MOSFET; HEXFET® Power MOSFET; Fast Switching; Low $r_{DS(on)}$; Cost Eff. Low Thermal Resistance;	$V_{dss} = 800\text{ V}$; $I_D = 4.1\text{ A}$; $r_{DS(on)} = 35\Omega$; $Q_g = 78\text{ nC}$;	TH / Radial TO-220AB	

Low- and High-Side Switches

Product Name	Status	Description	Features	Package	Q-Level
Si5902BDC-T1-E3		Dual N-Channel Switching MOSFET	$30\text{ V}/4\text{ A}$, $R_{dson} = 0.053\text{ ohm}$, $Q_g = 4.5\text{ nC}$	SMD 1206-8 ChipFET	
Si5904DC-T1-E3		Dual N-Channel Switching MOSFET	$20\text{ V}/4\text{ A}$, $R_{dson} = 0.065\text{ ohm}$, $Q_g = 4\text{ nC}$	SMD 1206-8 ChipFET	

Inkjet Printer : Power Supply, Snubber

Freewheeling Diode

Product Name	Status	Description	Features	Package	Q-Level
MBRB10H100CTE3		High-Voltage Schottky Rectifier Dual Common Cathode	100 V/10 A, Vf = 0.76V@IF = 5A@25°C	SMD TO-263AB	
VS-6CWQ06		High Performance Schottky Rectifier	60 V/	SMD TO-252AA	

Switch Diode

Product Name	Status	Description	Features	Package	Q-Level
1N4007		General Purpose Plastic Rectifier	IF(AV):1.0 A; Vrrm = 50V-1000V; IFSM = 30 A; VF = 1.1 V;	TH / Axial DO-204AL (DO-41)	
1N5408		General-purpose Plastic Rectifier; Tj max = 150 °C;	IF(AV): = 3 A; Vrrm = 50V-1000V; IFSM = 200 A;Vf = 1.2 V;	TH / Axial DO-201AD	
BYV26EGP		Glass Passivated Ultrafast Rectifier	IF(AV):1.0 A; VF:1.3 V; Vrrm=800V/1000V;Ifsm=30A Trr = 75 nS; Tjmax=175°C;	TH / Axial DO-204AC (DO-15)	
RS1PD		Fast-Switching Rectifier High Current Density; SMD; Glass Passivated;	IF(AV):1.0 A; VF:1.3 V; Vrrm=100V-600V; IFSM:30A; Trr = 150~250 ns;	SMD DO-220AA (SMP)	

TVS

Product Name	Status	Description	Features	Package	Q-Level
1.5KE		TRANSZORB® Transient Voltage Suppressors Tj max = 175 °C	V(BR) Unidirec.:6.8-540V V(BR) Bidirec.:6.8-440V; PPPM = 1500 W; PD = 6.5 W	TH / Axial 1.5KE	
P4KE		TRANSZORB® Transient Voltage Suppressors Tj max = 175 °C;	V(BR)Unidirec.:6.8V-540V; V(BR) Bidirec.:6.8V-440V PPPM = 400 W; PD = 1 W;	TH / Axial DO-204AL (DO-41)	
P6KE		TRANSZORB® Transient Voltage Suppressors Tj max = 175 °C;	V(BR)Unidirec.:6.8V-540V; V(BR) Bidirec.:6.8V-440V PPPM = 600 W; PD = 5 W;	TH / Axial DO-204AC (DO-15)	