



The DNA of tech.™

25 V to 150 V MOSFETs in PowerPAK® SO-8L and PowerPAK® 8x8L Packages with Gullwing Leads



KEY BENEFITS:

- PowerPAK® SO-8L package
 - Gullwing leads improve resilience for mechanical stress and avoid coefficient of thermal expansion mismatch
 - Optimized solderability for single-sided PCBs
 - Package footprint is 52 % smaller and profile is 50 % thinner than DPAK
 - Complete P2P with PowerPAK SO-8
 - RoHS-compliant, halogen-free, and 100 % lead (Pb)-free
- PowerPAK® 8x8L package
 - Higher I_D current capability and better thermal dissipation than PowerPAK SO-8
 - $T_j = 175\text{ }^\circ\text{C}$ allows for higher operation temperature
 - Gullwing leads improve resilience for mechanical stress and avoid coefficient of thermal expansion mismatch
 - Package footprint is 60 % smaller and profile is 57 % thinner than D²PAK
 - RoHS-compliant, halogen-free, and 100 % lead (Pb)-free

RESOURCES

- For technical questions contact: pmossupport@vishay.com
- Sales contacts: www.vishay.com/doc?99914



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APPLICATIONS AND END PRODUCTS

Designed for DC/DC converters, synchronous rectification, and motor drive control



TELECOM
POWER



DATA
CENTERS



POWER
SUPPLIES



POWER
TOOLS

Package	Form Factor (mm)	Part Number	V _{DS} (V)	V _{GS} (V)	R _{DS(on)} (Ω)	R _{DS(on)} (Ω)	R _{DS(on)} (Ω)	Q _g (nC)	Q _{gs} Typ. (nC)	Q _{gd} Typ. (nC)	I _D (A)	R _θ Typ. (Ω)
					Max. V _{GS} = 10 V	Max. V _{GS} = 7.5 V	Max. V _{GS} = 4.5 V	Typ. V _{GS} = 10 V	Typ. (nC)	Typ. (nC)	T _C = 25 °C	
PowerPAK SO-8L	5 x 6	SiJA22DP	25	20	0.001		0.001	83	18	9.8	201	1
PowerPAK SO-8L	5 x 6	SiJ438ADP	40	20	0.001		0.002	108	25.3	8.3	169	1.2
PowerPAK SO-8L	5 x 6	SiJ438DP	40	20	0.001		0.002	121	22.6	13.5	80	1.1
PowerPAK SO-8L	5 x 6	SiJA52ADP	40	20	0.002		0.002	66	15	4.5	131	1.1
PowerPAK SO-8L	5 x 6	SiJA52DP	40	20	0.002		0.002	97.5	19.6	12.5	60	1.1
PowerPAK SO-8L	5 x 6	SiJA54DP	40	20	0.002		0.003	69	13.5	6.9	60	1.1
PowerPAK SO-8L	5 x 6	SiJA58ADP	40	20	0.003		0.004	40.5	9.3	2.8	109	1.4
PowerPAK SO-8L	5 x 6	SiJA58DP	40	20	0.003		0.004	50	10.3	4.3	109	1.2
PowerPAK SO-8L	5 x 6	SiJA72ADP	40	20	0.003		0.005	33	8.2	2.3	96	1.3
PowerPAK SO-8L	5 x 6	SiJA74DP	40	20	0.004		0.006	27	6.3	2.1	81.2	1.45
PowerPAK SO-8L	5 x 6	SiJ150DP	45	20	0.003		0.004	46.7	11.1	3.6	110	1.15
PowerPAK SO-8L	5 x 6	SiJ450DP	45	20	0.002		0.003	75.5	17	4.5	113	1.2
PowerPAK SO-8L	5 x 6	SiJ186DP	60	20	0.005	0.005		24.5	6.5	4.5	79.4	0.85
PowerPAK SO-8L	5 x 6	SiJ188DP	60	20	0.004	0.005		29	6.8	5	92.4	0.9
PowerPAK SO-8L	5 x 6	SiJ462ADP	60	20	0.007		0.011	19.8	3.8	2.9	39.3	0.85
PowerPAK SO-8L	5 x 6	SiJ470DP	100	20	0.009	0.01		36.9	7.9	9.2	58.8	1.35
PowerPAK SO-8L	5 x 6	SiJ494DP	150	20	0.023	0.027		20.3	5.5	6.7	36.8	1.1
PowerPAK 8x8L	8 x 8	SiJH440E	40	20	0.001	0.001		279	64	24.5	200	1.7
PowerPAK 8x8L	8 x 8	SiJH600E	60	20	0.001	0.001		141	42	20	373	1.2
PowerPAK 8x8L	8 x 8	SiJH800E	80	20	0.002	0.002		140	46	22	299	1.1
PowerPAK 8x8L	8 x 8	SiJH112E	100	20	0.003	0.004		106	36	23	225	1.3