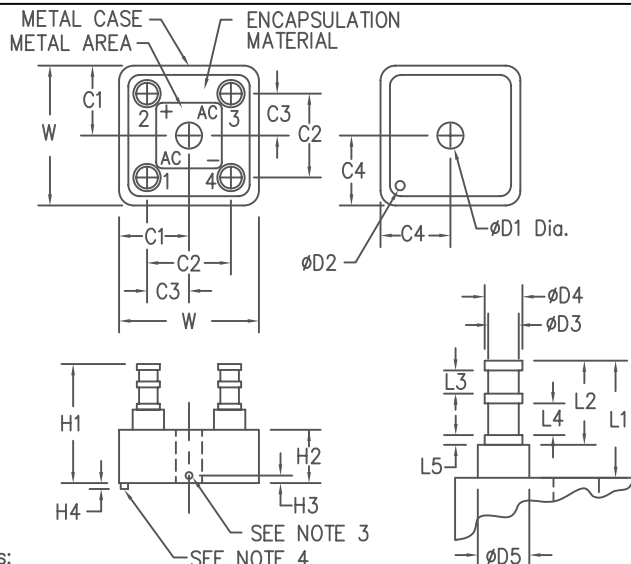


25 Amp Single Phase Bridge Rectifiers SPA25 to SPD25



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
C1	.552	.572	14.02	14.53	
C2	.624	.760	15.85	19.30	
C3	.312	.380	7.92	9.65	
C4	.495	.512	12.57	13.00	
ØD1	.189	.195	4.80	4.95	
ØD2	.057	.067	1.45	1.70	
ØD3	.108	.118	2.74	3.00	
ØD4	.141	.151	3.58	3.84	
ØD5	.225	.235	5.72	5.97	
H1	.669	1.060	17.53	26.92	
H2	.300	.500	7.62	12.70	
H3	.040	.060	1.02	1.52	
H4	.042	.062	1.07	1.57	
L1	.370	.560	9.40	14.22	
L2	.307	.365	7.80	9.27	
L3	.089	.099	2.26	2.49	
L4	.132	.142	3.35	3.61	
L5	.026	.036	.66	.91	
W	1.104	1.144	28.04	29.06	

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SPA25		100V	110V
SPB25		200V	220V
SPC25		400V	440V
SPD25		600V	660V

- High Rel Screening Available
- Fused-in-glass diodes used
- Controlled Avalanche Characteristics
- High Surge Rating
- Electrically isolated Aluminum case
- MIL-PRF-19500 Similarity

Electrical Characteristics

Average D.C. output current	IOAV 25 Amps	TC = 55°C
Average D.C. output current	IOAV 15 Amps	TC = 100°C
Maximum surge current	IFSM 150 Amps	8.3ms, half sine, TJ = 55°C
Max peak forward voltage per leg	VFM 1.40 Volts	IFM = 39A: TJ = 25°C*
Max peak reverse current per leg	IRM 2 µA	VRRM, TJ = 25°C
Max peak reverse current per leg	IRM 150 µA	VRRM, TJ = 100°C*
Max. recovery time per leg	trr 2.5 µs	0.5A, 1.0A, 0.25A
Isolation voltage	VISO 2800 Volts	10 µA DC max for 10sec. 25°C

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	TSTG	-65°C to 150°C
Operating temperature range	TJ	-65°C to 150°C
Maximum thermal resistance	RθJC	2.5°C/W junction to case
Maximum thermal resistance per package	RθJA	20°C/W junction to ambient
Weight		1.1 ounces (31.5 grams) typical



SCOTTSDALE

8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

06-01-07 Rev. 4

SPA25 to SPD25

Figure 1
Typical Forward Characteristics – Per Leg

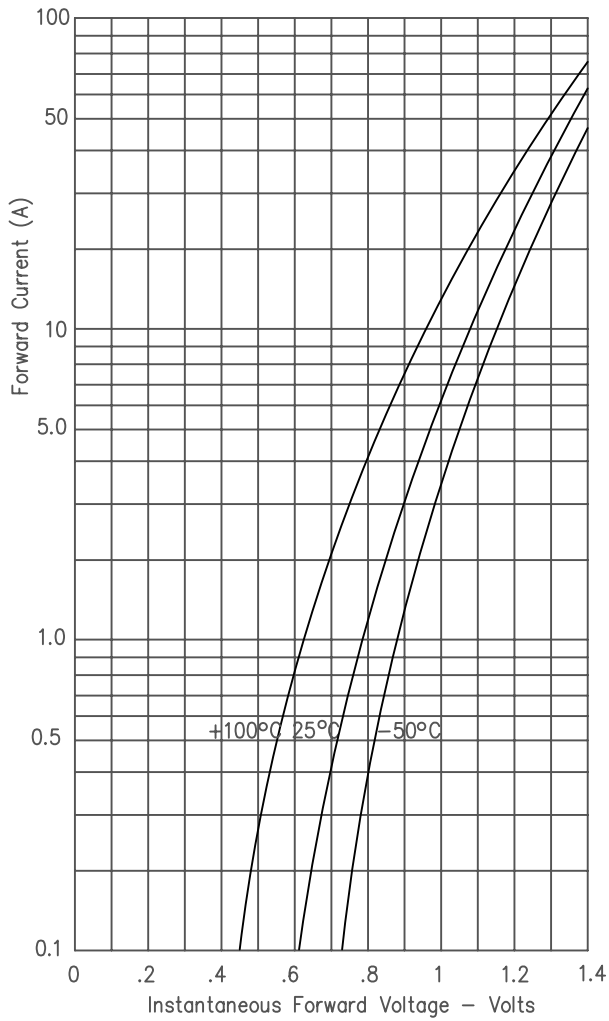


Figure 3
Current Derating

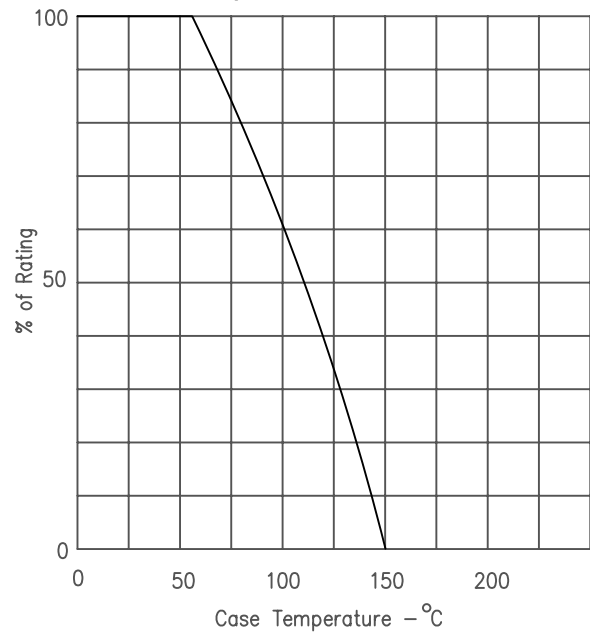
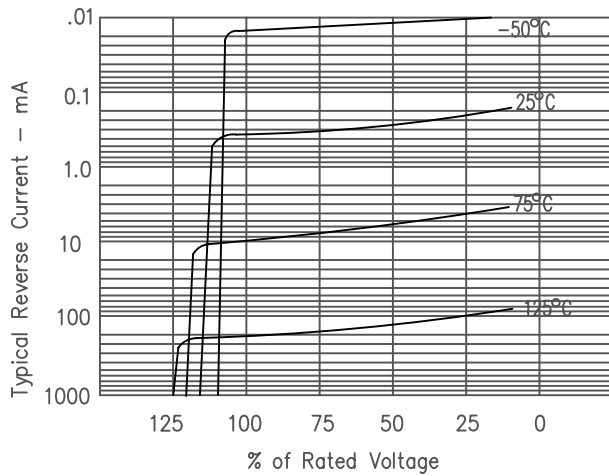


Figure 2
Typical Reverse Leakage Current – Per Leg



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Microchip:](#)

[SPA25](#) [SPB25](#) [SPC25](#) [SPD25](#) [MQSPA25](#) [MQSPC25](#) [MQSPB25](#) [MQSPD25](#)