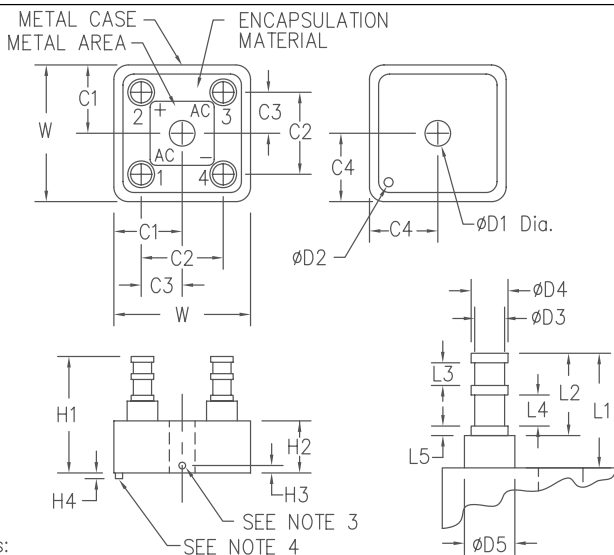


# 25 Amp Single Phase Bridge Rectifiers SPA25 to SPD25



Notes:

1. Terminals are Sn/Pb dipped.
2. Polarity shall be marked on terminal side of device.
3. Point at which TC is read (must be in metal part of case)
4. Locating pin shall be adjacent to positive terminal.

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	t <sub>rr</sub> 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

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# SPA25 to SPD25

Figure 1  
Typical Forward Characteristics – Per Leg

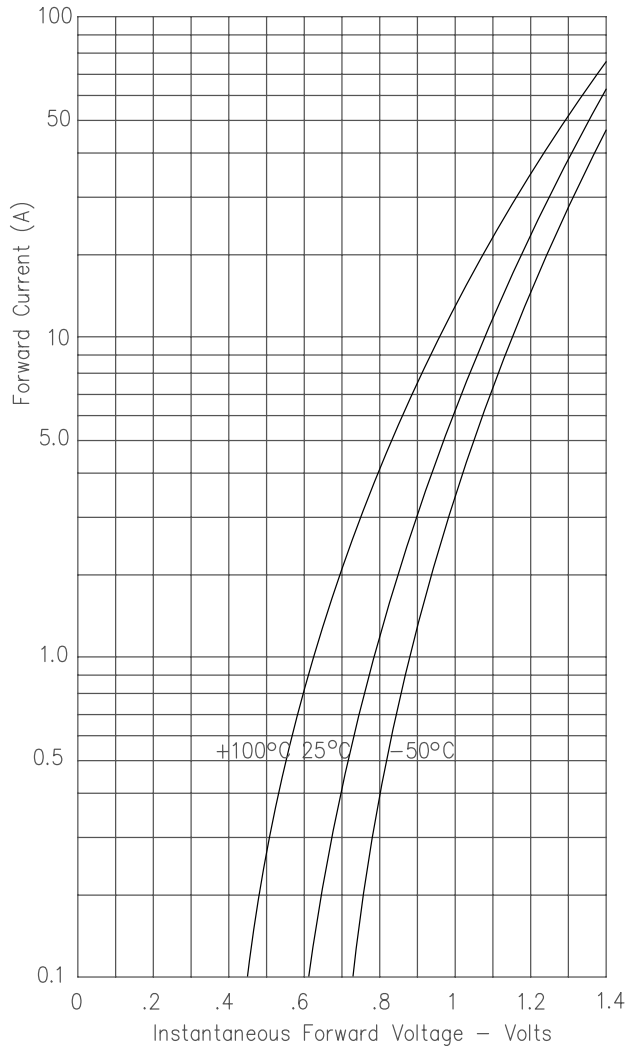


Figure 3  
Current Derating

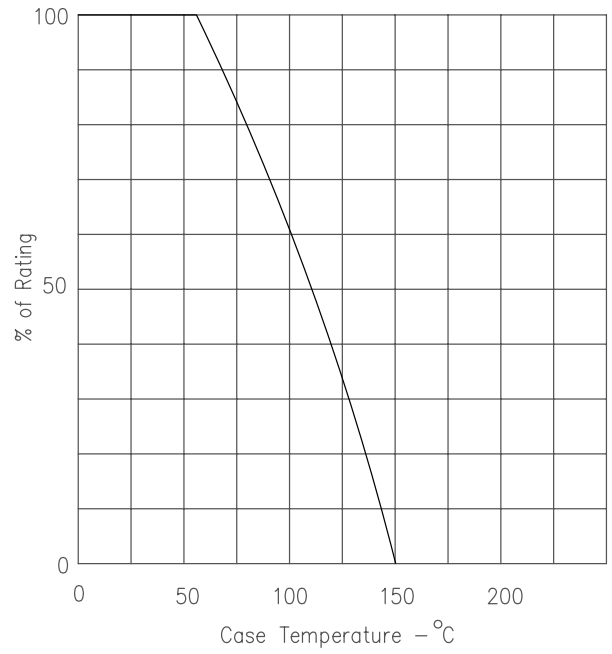


Figure 2  
Typical Reverse Leakage Current – Per Leg

