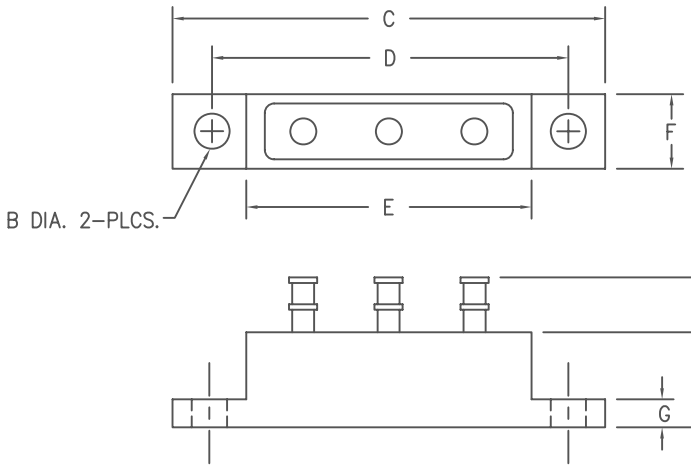
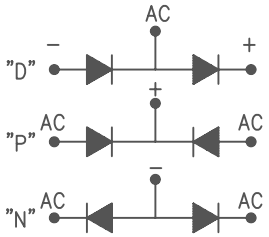
Center Tap & Doubler Assemblies
Ultrafast Recovery
804 Series



Dim.	Inches	Millimeter
A	.660 MAX.	16.76 MAX.
B	.165–.175 DIA.	4.19–4.45 DIA.
C	2.240–2.260	56.90–57.40
D	1.870–1.880	47.50–47.75
E	1.470–1.490	37.34–37.85
F	.334–.354	8.48–8.99
G	.115–.135	2.92–3.43
H	.302–.322	7.67–8.18



MARKING:
Alternating Current Input: AC
Cathode Positive Output: +
Anode Negative: –
Part Number is printed on the body

NOTES:
Add suffix P, N or D for terminal configuration P, N or D
For example, for center tap configuration P order 804–IP

Microsemi Catalog Number	Repetitive Peak Reverse Voltage V_{RRM}
804–1	50V
804–2	100V
804–3	125V
804–4	150V

- Current ratings to 20A
- V_{RRM} to 150V
- Only fused–in–glass diodes used
- 150°C junction temperature
- Surge ratings to 250A
- Recovery times to 50nS
- Electrically isolated Aluminum case
- MIL–PRF–19500 Similarity
- Sn/Pb terminations

Electrical Characteristics

		804
Maximum DC output current–T_C = 55°C	I_O	20A
Maximum DC output current–T_C = 100°C	I_O	14A
Maximum surge current–T_C = 100°C	I_{FSM}	250A
Max peak forward voltage per leg @ 25°C	V_{FM}	.95V @ 10A*
Max peak reverse current @ 25°C, at Vrrm	I_{RM}	10uA
Max peak reverse current @ 100°C, at Vrrm	I_{RM}	500uA
Max. recovery time 1A, 1A, 0.5A	t_{rr}	50nS

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	–65°C to 150°C
Operating temperature range	T_J	–65°C to 150°C
Max.thermal resistance	$R_{\Theta JC}$	6.0°C/W
Max. thermal resistance junction to ambient	$R_{\Theta JA}$	20°C/W
Weight–typical		10 grams

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06–01–07 Rev. 3

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Figure 1
Typical Forward Characteristics – Per Leg

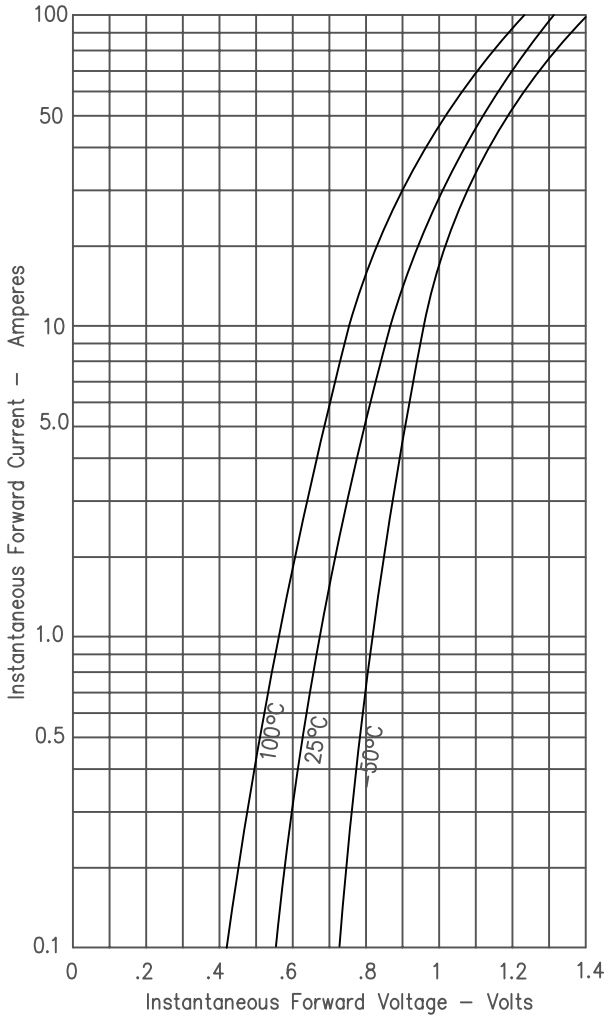

Figure 2
Typical Reverse Leakage Current – Per Leg

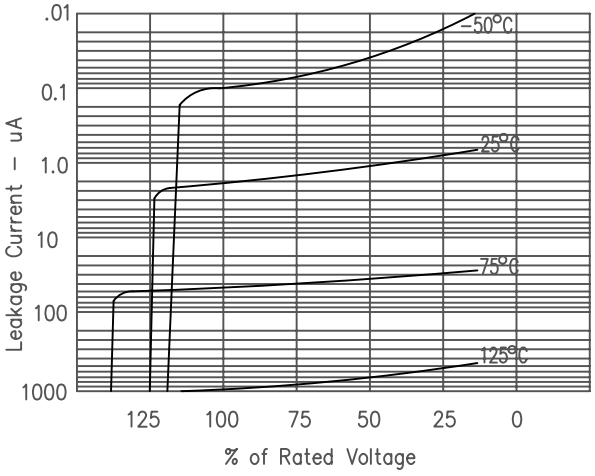

Figure 3
Current Derating