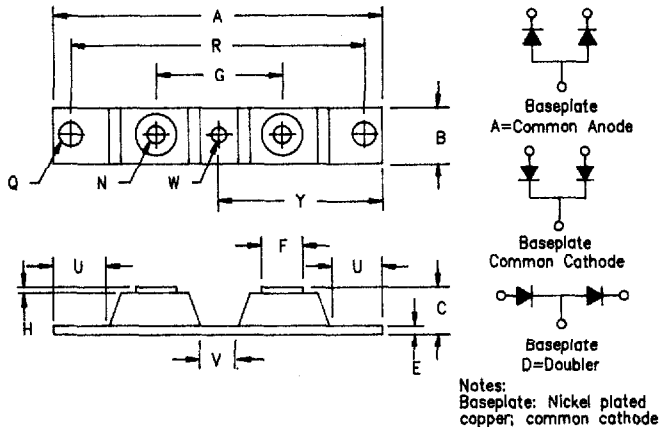


Twin Diode Module TDM150



Dim.	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
A	---	3.630	---	92.20	
B	0.700	0.800	17.78	20.32	
C	---	0.625	---	15.87	
E	0.120	0.130	3.05	3.30	
F	0.490	0.510	12.45	12.95	
G	1.375 BSC	---	34.92 BSC	---	
H	---	0.050	---	1.27	
N	1/4-20 UNC	---	---	---	Dia.
Q	.280	.310	6.86	7.11	Dia.
R	3.150 BSC	---	80.01 BSC	---	
U	0.600	---	15.24	---	
V	0.330	0.350	8.38	8.89	
W	0.170	0.190	4.32	4.82	Dia.
Y	1.815 BSC	---	46.10 BSC	---	

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
TDM15002*	200V	200V
TDM15004*	400V	400V
TDM15006*	600V	600V
TDM15008*	800V	800V
TDM15010*	1000V	1000V
TDM15012*	1200V	1200V

*Add Suffix A for Common Anode, D for Doubler

- Compact Package
- Glass Passivated Die
- 2 x 150 Amp Current Rating
- Simplifies Circuit Assembly
- High Surge Capacity

Electrical Characteristics		
Average forward current per pkg	I _{F(AV)} 300 Amps	T _C = 120°C, half sine, R _{θJC} = 0.15°C/W
Average forward current per leg	I _{F(AV)} 150 Amps	T _C = 120°C, half sine, R _{θJC} = 0.30°C/W
Maximum surge current per leg	I _{FSM} 2500 Amps	8.3 ms, half sine, T _J = 175°C
Max I ² t for fusing	I ² t 26000 A ² s	
Max peak forward voltage per leg	V _{FM} 1.1 volts	I _{FM} = 200A; T _J = 25°C*
Max peak forward voltage per leg	V _{FM} 1.0 volts	I _{FM} = 200A; T _J = 175°C*
Max peak reverse current per leg	I _{RM} 5 mA	V _R = 150V, T _J = 150°C
Typical reverse current per leg	I _{RM} 3.0 uA	V _R = 150V, T _J = 25°C

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

Thermal and Mechanical Characteristics		
Storage temp range	T _{STG}	-40°C to 175°C
Operating junction temp range	T _J	-40°C to 175°C
Max thermal resistance per leg	R _{θJC}	0.3°C/W Junction to case
Typical thermal resistance per leg	R _{θCS}	0.08°C/W Case to sink
Terminal Torque		50 inch pounds maximum
Mounting Base Torque (outside holes)		40 inch pounds maximum
Mounting Base Torque (center hole)		10 inch pounds maximum
center hole must be torqued first		
Weight		2.82 ounces (80 grams) typical

Microsemi Corp.
6 Colorado

PH: 303-469-2161
FAX: 303-466-3775

E-59

TDM150

Figure 1
Typical Forward Characteristics - Per Leg

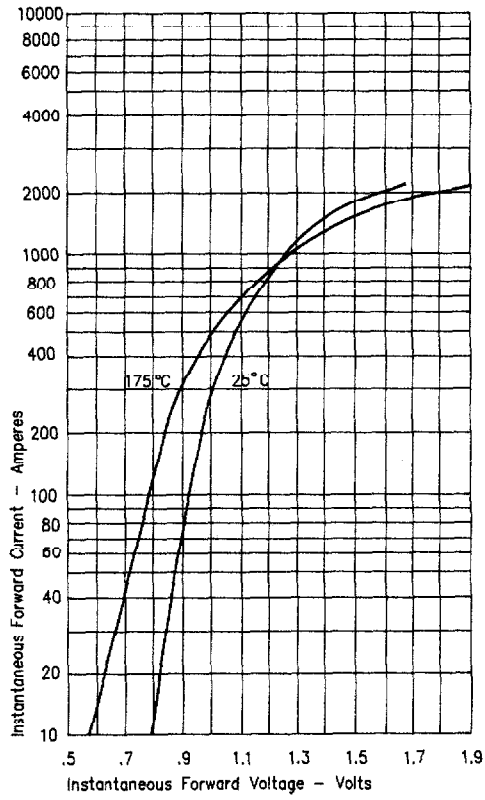


Figure 3
Forward Current Derating - Per Leg

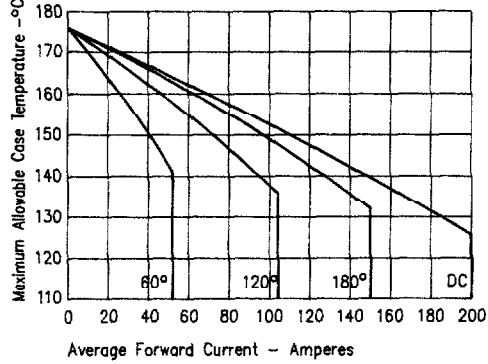


Figure 4
Maximum Forward Power Dissipation - Per Leg

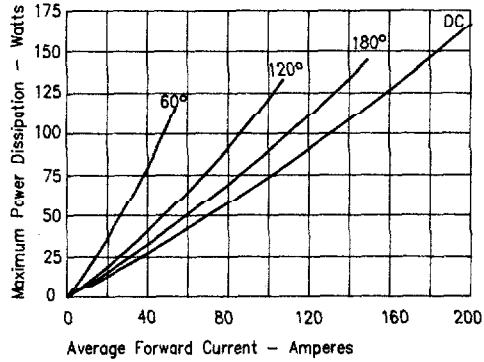


Figure 2
Typical Reverse Characteristics - Per Leg

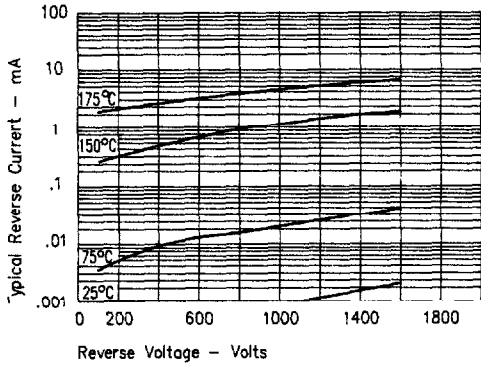
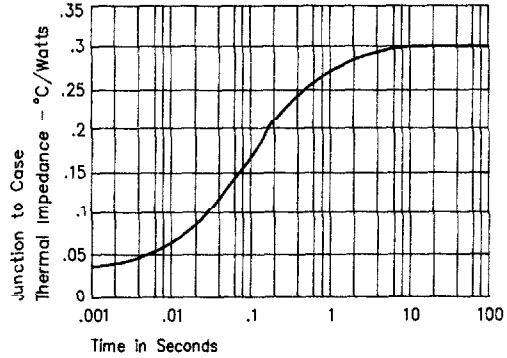
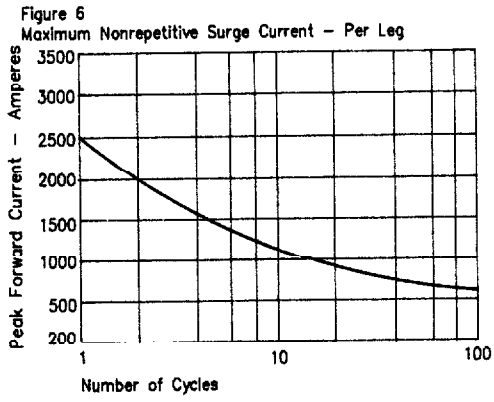


Figure 5
Transient Thermal Impedance - Per Leg



TDM150



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