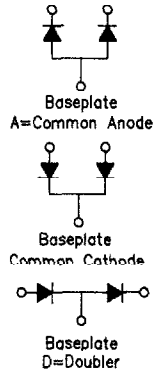
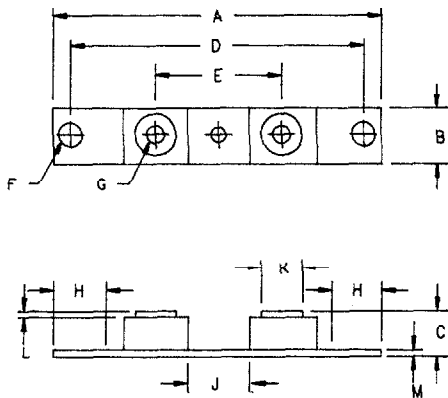


Twin Diode Module TDM300



Dim.	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
A	---	4.600	---	116.84	
B	1.240	1.260	31.49	32.00	
C	---	.925	---	23.49	
D	3.99 BSC		101.34 BSC		
E	1.98 BSC		50.29 BSC		
F	0.320	0.340	8.13	8.64	Dia.
G	---	---	---	---	5/16-18
H	0.630	---	16.00	---	
J	0.680	0.780	17.27	19.81	
K	0.610	0.640	15.49	16.26	
L	---	.100	---	2.54	
M	0.182	0.192	4.62	4.88	

Notes:
Baseplate: Nickel plated
copper; common cathode

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
TDM30002*	200V	200V
TDM30004*	400V	400V
TDM30006*	600V	600V
TDM30008*	800V	800V
TDM30010*	1000V	1000V
TDM30012*	1200V	1200V

*Add Suffix A for Common Anode, D for Doubler

- Compact Package
- Glass Passivated Die
- 2 x 300 Amp Current Rating
- Simplifies Circuit Assembly
- Non-Isolated Baseplate

Electrical Characteristics		
Average forward current per pkg	I _{F(AV)} 600 Amps	T _C = 130°C, half sine, R _{θJC} = 0.08°C/W
Average forward current per leg	I _{F(AV)} 300 Amps	T _C = 130°C, half sine, R _{θJC} = 0.15°C/W
Maximum surge current per leg	I _{FSM} 5500 Amps	8.3 ms, half sine, T _J = 175°C
Max I ² t for fusing	I ² t 125990 A ² s	
Max peak forward voltage per leg	V _{FM} 1.25 Volts	I _{FM} = 1000A; T _J = 25°C*
Max peak forward voltage per leg	V _{FM} 1.20 Volts	I _{FM} = 1000A; T _J = 175°C*
Max peak reverse current per leg	I _{RM} 10 mA	V _{RRM} , T _J = 150°C
Max peak reverse current per leg	I _{RM} 250 uA	V _{RRM} , T _J = 25°C*
Typical reverse current per leg	I _{RM} 17 uA	V _{RRM} , T _J = 25°C*

*Pulse test: Pulse width 8.33 msec, Duty cycle <1%

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}	0.15°C/W Junction to case
Typical thermal resistance per leg	R _{θCS}	0.04°C/W Case to sink
Terminal Torque		75 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		9.3 ounces (263.7 grams) typical

Microsemi Corp.
Colorado

TDM300

Figure 1
Typical Forward Characteristics - Per Leg

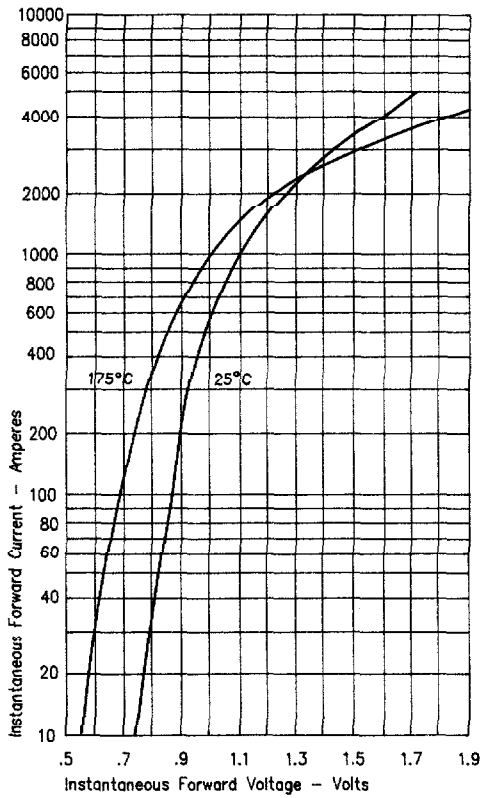


Figure 3
Forward Current Derating - Per Leg

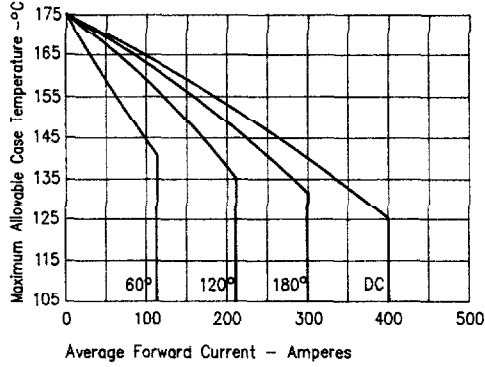


Figure 4
Maximum Forward Power Dissipation - Per Leg

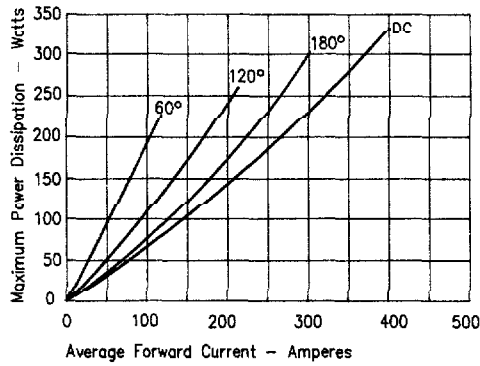


Figure 2
Typical Reverse Characteristics - Per Leg

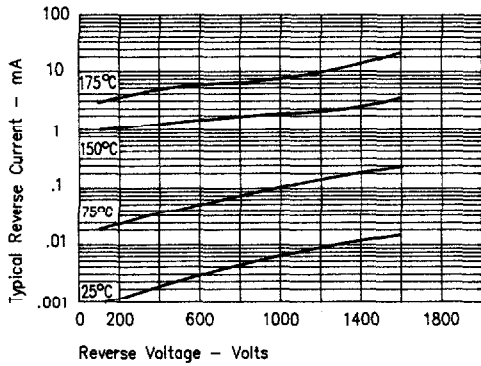
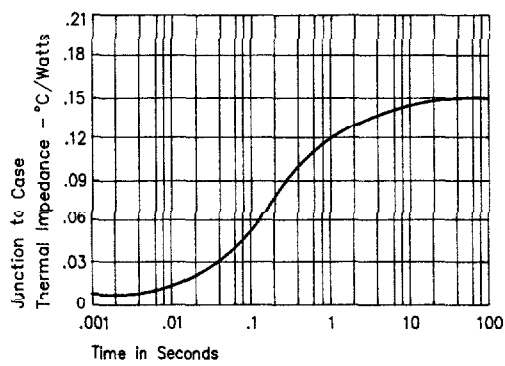


Figure 5
Transient Thermal Impedance - Per Leg



TDM300

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