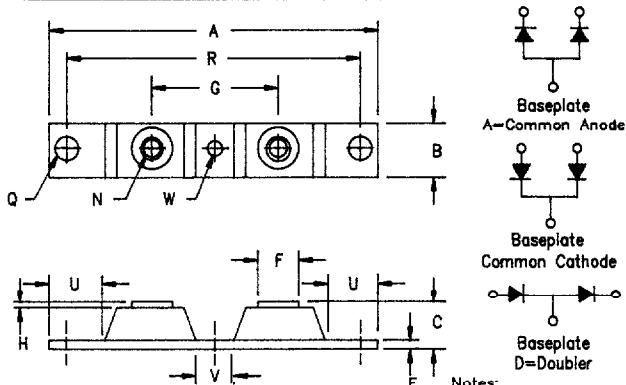


Schottky PowerMod CPT30060



Dim.	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
A	---	3.630	---	92.20	
B	0.700	0.800	17.78	20.32	
C	---	0.630	---	16.00	
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	0.010	---	0.25	---	
N	---	---	---	---	1/4-20
Q	0.275	0.290	6.99	7.37	Dia.
R	3.150	BSC	80.01	BSC	
U	0.600	---	15.24	---	
V	0.312	0.340	7.92	8.64	
W	0.180	0.195	4.57	4.95	Dia.

Notes:
Baseplate: Nickel plated copper; common cathode

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
CPT30060*	60V	60V

*Add Suffix A for Common Anode, D for Doubler

- Schottky Barrier Rectifier
- Guard Ring Protection
- VRRM 60 Volts
- 175°C Junction Temperature
- Reverse Energy Tested

Electrical Characteristics			
Average forward current per pkg	I _{F(AV)} 300 Amps	I _C = 127°C, Square wave, R _{θJC} = 0.20°C/W	
Average forward current per leg	I _{F(AV)} 150 Amps	T _C = 127°C, Square wave, R _{θJC} = 0.40°C/W	
Maximum surge current per leg	I _{FSM} 2000 Amps	8.3ms, half sine, T _J = 175°C	
Maximum repetitive reverse current per leg	I _{R(OV)} 2 Amps	f = 1 KHZ, 25°C, 1 μsec square wave	
Max peak forward voltage per leg	V _{FM} .82 Volts	I _{FM} = 200A; T _J = 25°C*	
Max peak forward voltage per leg	V _{FM} .68 Volts	I _{FM} = 200A; T _J = 175°C*	
Max peak reverse current per leg	I _{RM} 75 mA	VRRM, T _J = 125°C*	
Max peak reverse current per leg	I _{RM} 4.0 mA	VRRM, T _J = 25°C	
Typical junction capacitance	C _J 4300 pF	V _R = 5.0V, T _C = 25°C	

*Pulse test: Pulse width 300 μsec, 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}	0.40°C/W Junction to case
Typical thermal resistance	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		2.8 ounces (78.3 grams) typical

Microsemi Corp.
Colorado

CPT30060



Figure 1
Typical Forward Characteristics - Per Leg

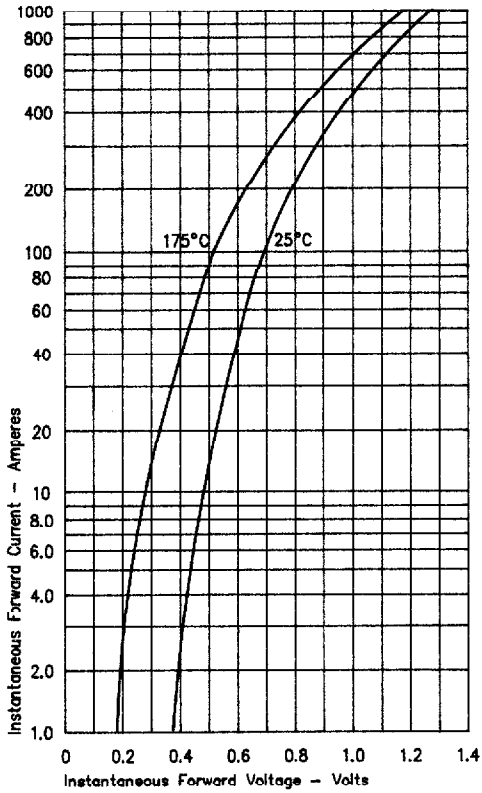


Figure 3
Typical Junction Capacitance - Per Leg

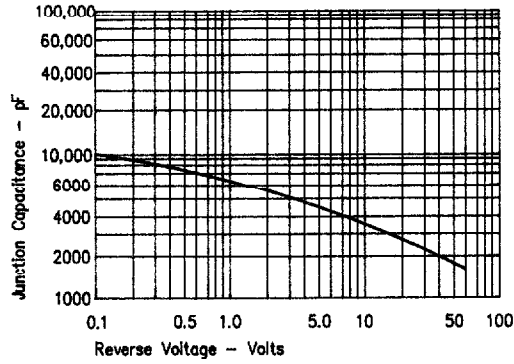


Figure 4
Forward Current Derating - Per Leg

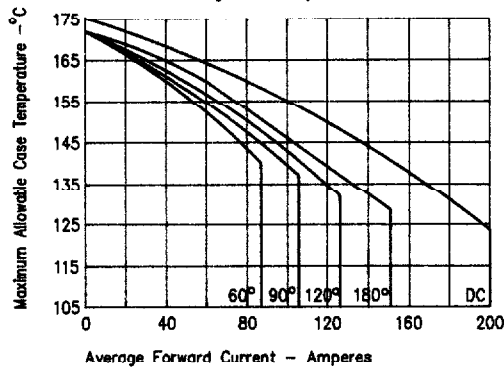


Figure 2
Typical Reverse Characteristics - Per Leg

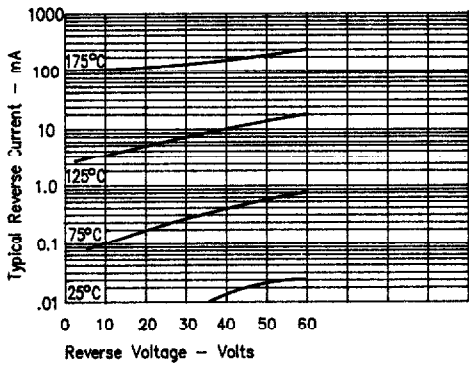


Figure 5
Maximum Forward Power Dissipation - Per Leg

