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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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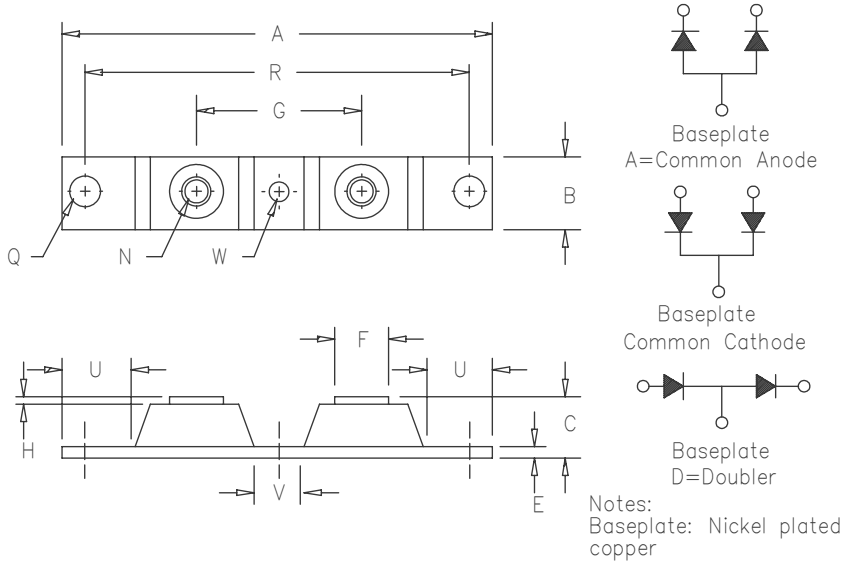
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Schottky PowerMod

CPT600120 — CPT600150



Dim.	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
A	---	3.630	---	92.20	
B	0.700	0.800	17.78	20.32	
C	---	.680	---	17.28	
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	---	1.25	---	
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.

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
CPT600120*		120V	120V
CPT600150*		150V	150V

*Add Suffix A for Common Anode, D for Doubler

- Schottky Barrier Rectifier
- Guard ring protection
- 600 Amperes/ 120 to 150 Volts
- 175°C junction temperature
- Reverse energy tested
- ROHS Compliant

Electrical Characteristics

Average forward current per pkg	I _{F(AV)} 600 Amps	T _C = 132°C, Square wave, R _{θJC} = 0.10°C/W
Average forward current per leg	I _{F(AV)} 300 Amps	T _C = 132°C, Square wave, R _{θJC} = 0.20°C/W
Maximum surge current per leg	I _{FSM} 6000 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, 1μsec square wave
Max peak forward voltage per leg	V _{FM} 0.85 Volts	I _{FM} = 300A: T _J = 25°C
Max peak forward voltage per leg	V _{FM} 0.62 Volts	I _{FM} = 300A: T _J = 175°C
Max peak reverse current per leg	I _{RM} 75 mA	V _{RRM} , T _J = 125°C*
Max peak reverse current per leg	I _{RM} 7.0 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance per leg	C _J 7000 pF	V _R = 5.0V, T _C = 25°C

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

Thermal and Mechanical Characteristics

Storage temp range	T _{STG}	-55°C to 175°C
Operating junction temp range	T _J	-55°C to 175°C
Max thermal resistance per leg	R _{θJC}	0.20°C/W Junction to case
Max thermal resistance per pkg	R _{θJC}	0.10°C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.08°C/W Case to sink
Terminal Torque		35-40 inch pounds
Mounting Base Torque (outside holes)		30-40 inch pounds
Mounting Base Torque (center hole)		8-10 inch pounds
center hole must be torqued first		
Weight		2.8 ounces (78 grams) typical

CPT600120 – CPT600150

Figure 1
Typical Forward Characteristics – Per Leg

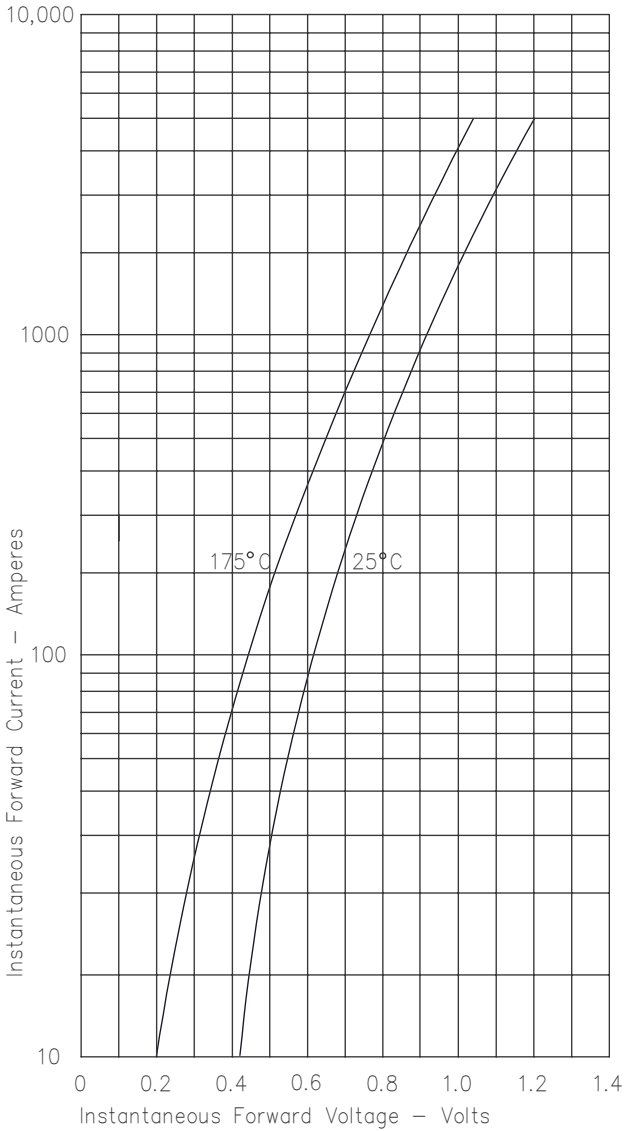


Figure 3
Typical Junction Capacitance – Per Leg

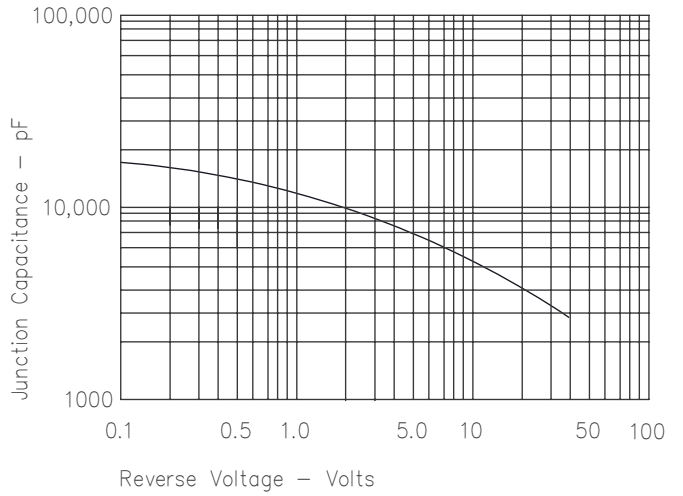


Figure 4
Forward Current Derating – Per Leg

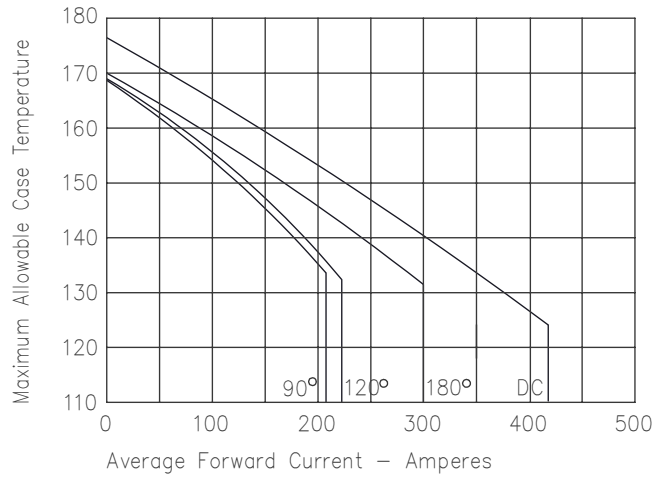


Figure 2
Typical Reverse Characteristics – Per Leg

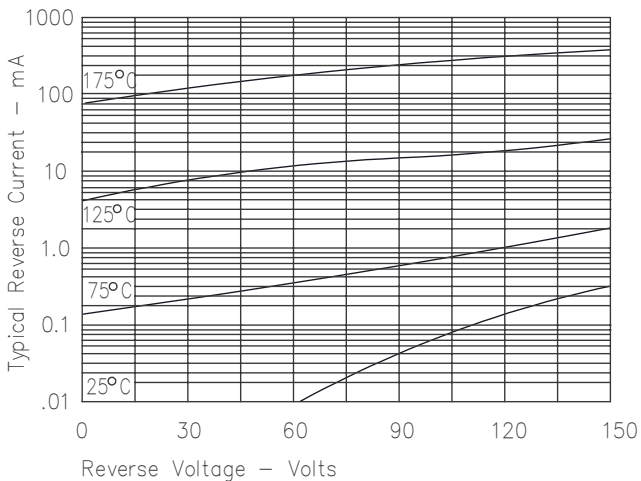
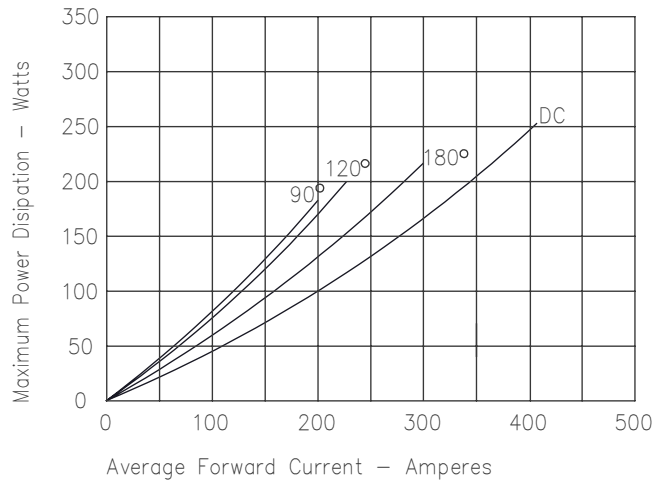


Figure 5
Maximum Forward Power Dissipation – Per Leg



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