



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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!



Contact us

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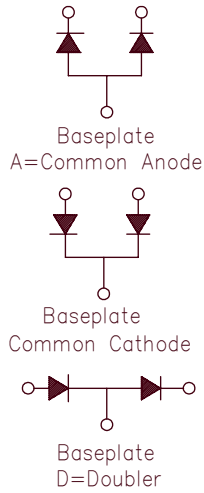
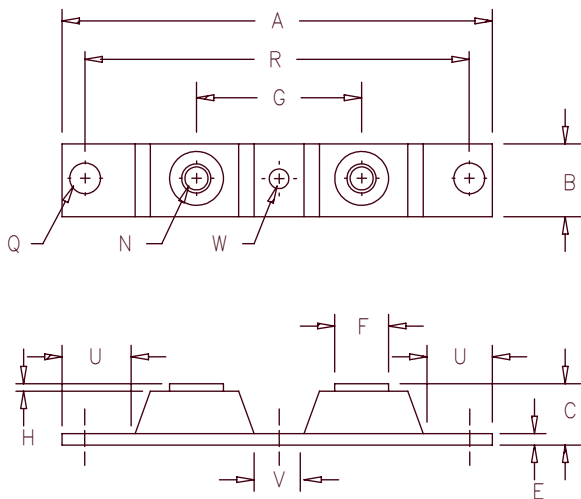
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Schottky PowerMod

CPT60080 — CPT600100



Notes:
Baseplate: Nickel plated copper

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
CPT60080*	MBR60080CT	80V	80V
CPT60090*		90V	90V
CPT600100*	MBR600100CT	100V	100V

*Add Suffix A for Common Anode, D for Doubler

- Schottky Barrier Rectifier
- Guard ring protection
- 600 Amperes/ 80 to 100 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} 8.0 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance per leg	C _J 9000 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

CPT60080 — CPT600100

Figure 1
Typical Forward Characteristics — Per Leg

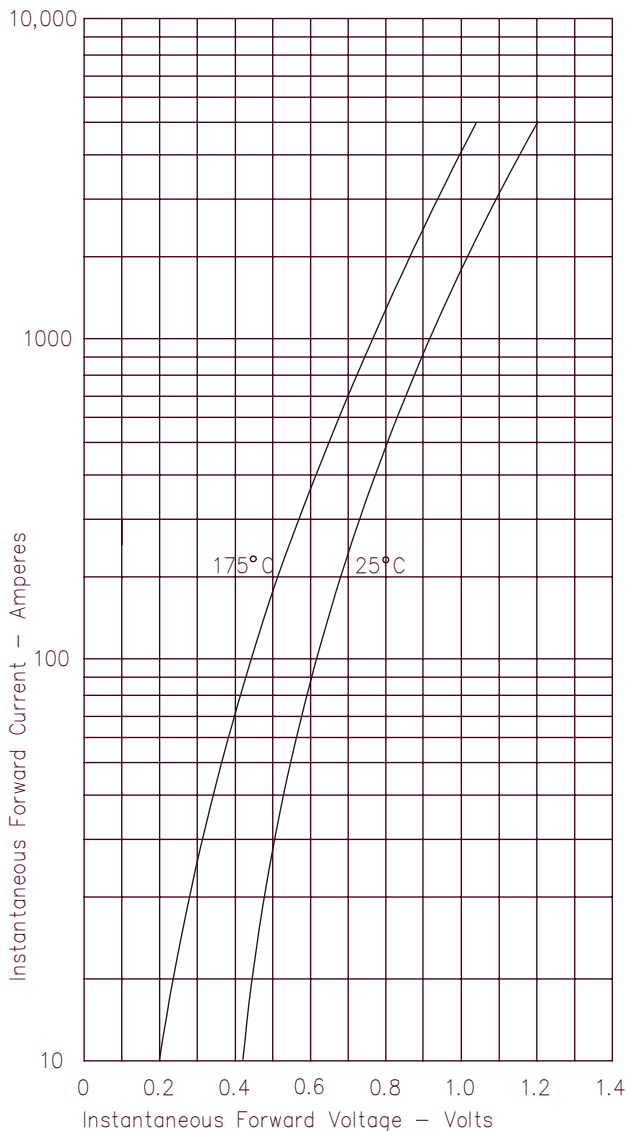


Figure 3
Typical Junction Capacitance — Per Leg

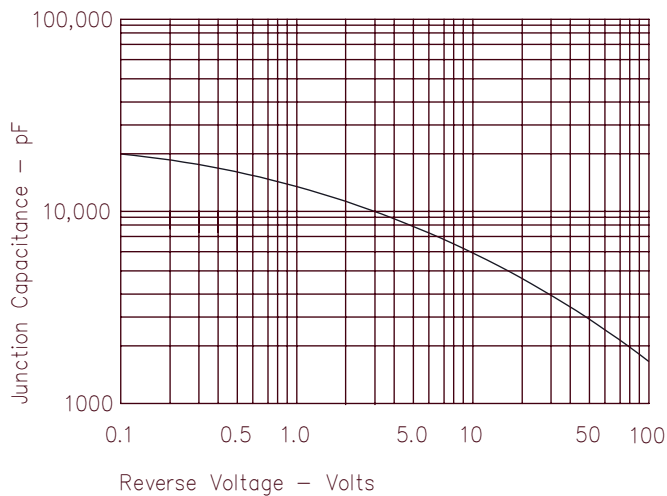


Figure 4
Forward Current Derating — Per Leg

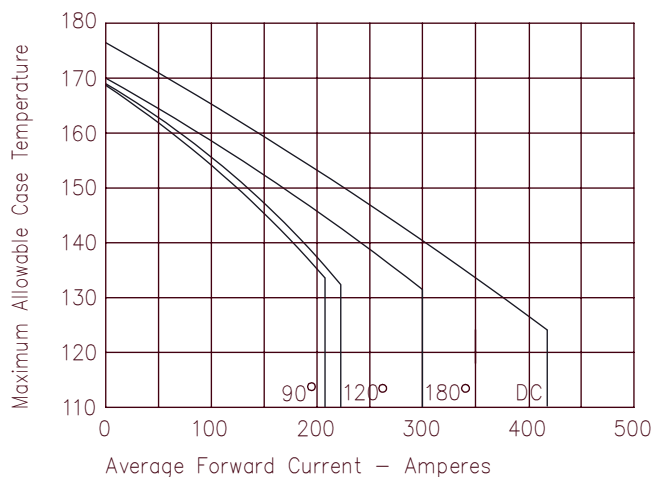


Figure 2
Typical Reverse Characteristics — Per Leg

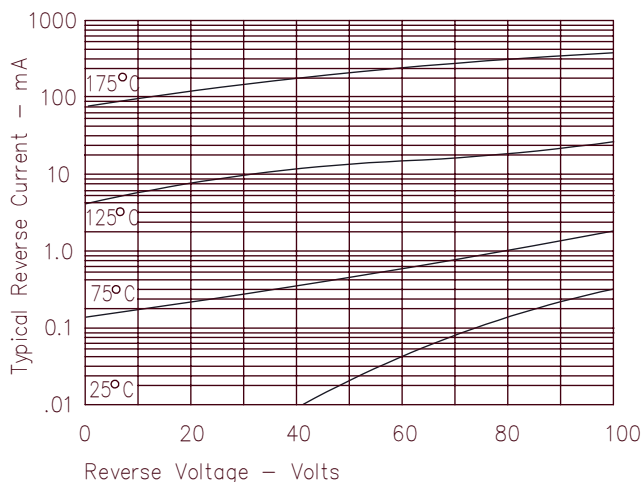
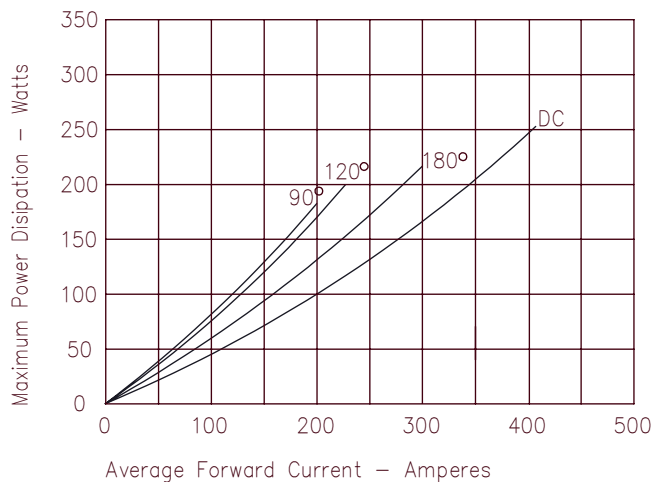


Figure 5
Maximum Forward Power Dissipation — Per Leg



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