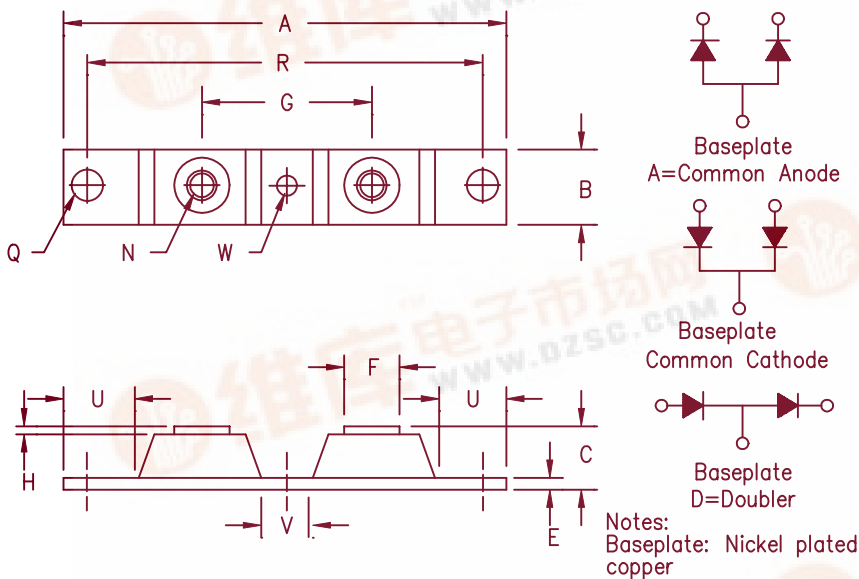


Schottky Powermod CPT30230



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.

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
CPT30230	30V	30V

*Add Suffix A for Common Anode, D for Doubler

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Power Loss
- 150°C Junction Temperature
- 300 Amperes/30 Volts
- Reverse Energy Tested

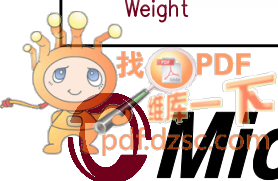
Electrical Characteristics

Average forward current per package	IF(AV) 300 Amps	TC = 103°C, square wave, RθJC = 0.2°C/W
Average forward current per leg	IF(AV) 150 Amps	TC = 103°C, square wave, RθJC = 0.4°C/W
Maximum surge current per leg	IFSM 2500 Amps	8.3ms, half sine, TJ = 150°C
Maximum repetitive reverse current per leg	IR(OV) 2 Amps	f = 1 KHz, 1 μsec square wave, TJ = 25°C
Max peak forward voltage per leg	VFM .55 Volts	IFM = 150A; TJ = 25°C*
Max peak reverse current per leg	IRM 1.5 Amps	VRRM, TJ = 125°C
Max peak reverse current per leg	IRM 10 mA	VRRM, TJ = 25°C
Typical junction capacitance per leg	CJ 4900 pF	VR = 5V, TJ = 25°C, f = 1MHz

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

Thermal and Mechanical Characteristics

Storage temp range	TSTG	-55°C to 175°C
Operation junction temp range	TJ	-55°C to 150°C
Max thermal resistance per leg	RθJC	0.4°C/W Junction to case
Max thermal resistance per pkg	RθJC	0.2°C/W Junction to case
Typical thermal resistance (greased)	RθCS	0.08°C/W Case to sink
Terminal Torque		35-50 inch pounds
Mounting Base Torque (outside holes)		30-40 inch pounds
Mounting Base Torque (center hole)		8-10 inch pounds
center bolt must be torqued first		
Weight		2.8 ounces (75 grams) typical



CPT30230

Figure 1
Typical Forward Characteristics – Per Leg

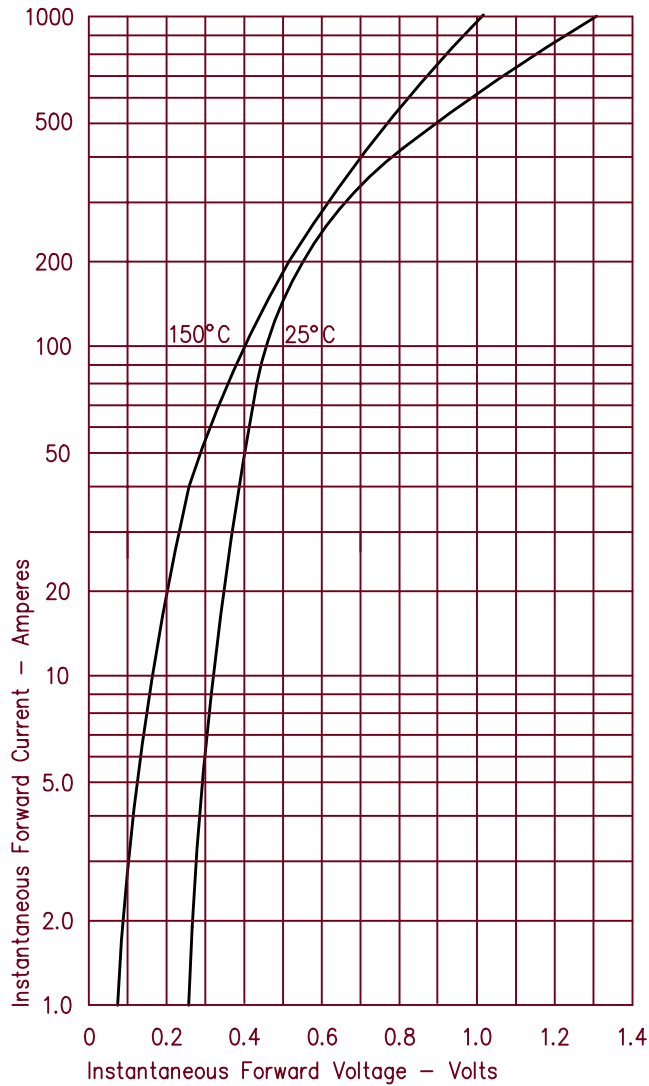


Figure 2
Typical Reverse Characteristics – Per Leg

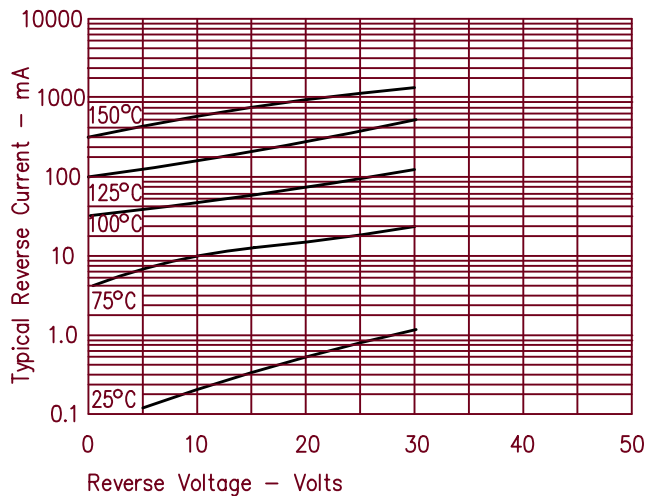


Figure 3
Typical Junction Capacitance – Per Leg

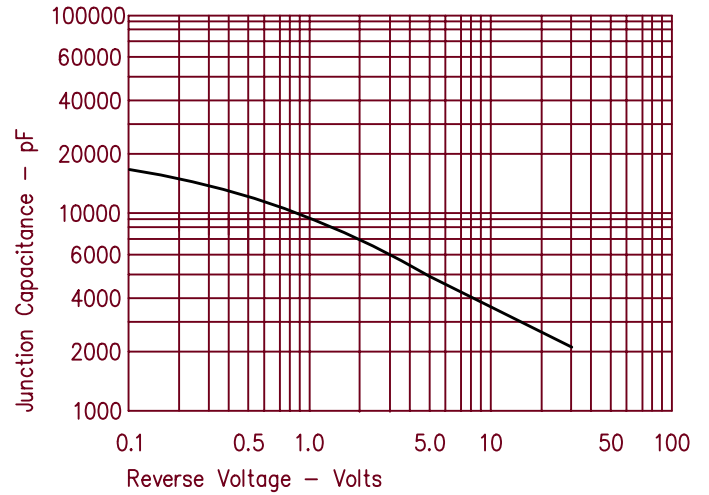


Figure 4
Forward Current Derating – Per Leg

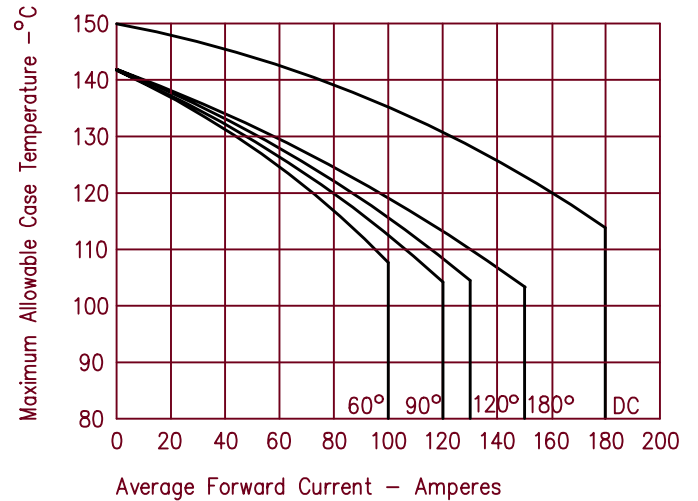


Figure 5
Maximum Forward Power Dissipation – Per Leg

