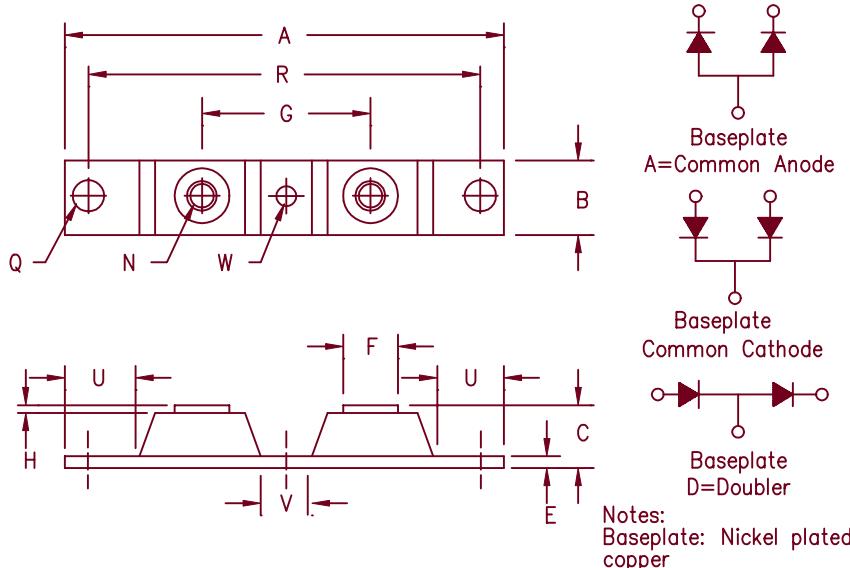


# Schottky PowerMod

## CPT60050 — CPT60060



Dim.		Inches	Millimeters			
		Min.	Max.	Min.	Max.	Notes
A	---	3.630	---	92.20		
B	0.700	0.800	17.78	20.32		
C	---	0.680	---	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	0.010	---	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

CPT60050\*  
CPT60060\*

50V  
60V

50V  
60V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 600 Amperes/50 to 60 Volts
- 175°C Junction Temperature
- Reverse Energy Tested

\*Add Suffix A for Common Anode, D for Doubler

### Electrical Characteristics

Average forward current per pkg

|F(AV) 600 Amps

T<sub>C</sub> = 136°C, Square wave, R<sub>θJC</sub> = 0.10°C/W

Average forward current per leg

|F(AV) 300 Amps

T<sub>C</sub> = 136°C, Square wave, R<sub>θJC</sub> = 0.20°C/W

Maximum surge current per leg

|FSM 6000 Amps

8.3ms, half sine, T<sub>J</sub> = 175°C

Maximum repetitive reverse current per leg

|R(OV) 2 Amps

f = 1 KHZ, 25°C, 1 usec square wave

Max peak forward voltage per leg

V<sub>FM</sub> 0.72 Volts

|FM = 300A: T<sub>J</sub> = 25°C

Max peak forward voltage per leg

V<sub>FM</sub> 0.58 Volts

|FM = 300A: T<sub>J</sub> = 175°C

Max peak reverse current per leg

|R<sub>M</sub> 75 mA

V<sub>RRM</sub>, T<sub>J</sub> = 125°C\*

Max peak reverse current per leg

|R<sub>M</sub> 8.0 mA

V<sub>RRM</sub>, T<sub>J</sub> = 25°C

Typical junction capacitance per leg

C<sub>J</sub> 11,100 pF

V<sub>R</sub> = 5.0V, T<sub>C</sub> = 25°C

\*Pulse test: Pulse width 300 usec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temp range

T<sub>STG</sub>

-55°C to 175°C

Operating junction temp range

T<sub>J</sub>

-55°C to 175°C

Max thermal resistance per leg

R<sub>θJC</sub>

0.20°C/W Junction to case

Max thermal resistance per pkg

R<sub>θJC</sub>

0.10°C/W Junction to case

Typical thermal resistance (greased)

R<sub>θCS</sub>

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 hole must be torqued first

Weight 2.8 ounces (78 grams) typical

# CPT60050 – CPT60060

查询"CPT60050"供应商

Figure 1

Typical Forward Characteristics – Per Leg

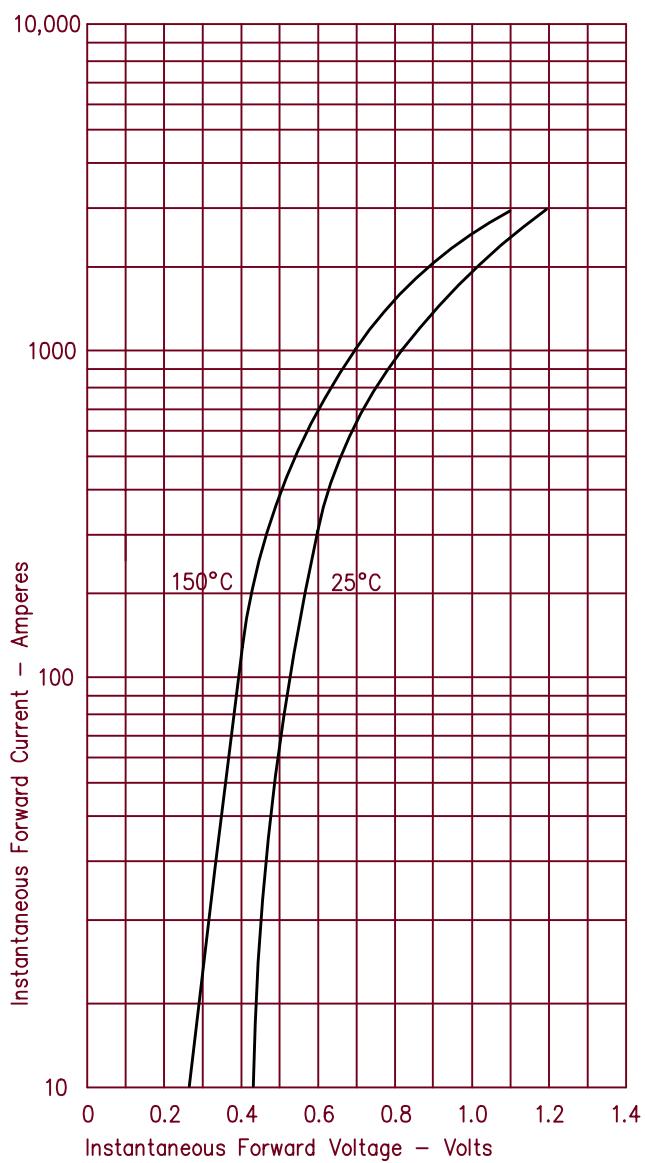


Figure 2

Typical Reverse Characteristics – Per Leg

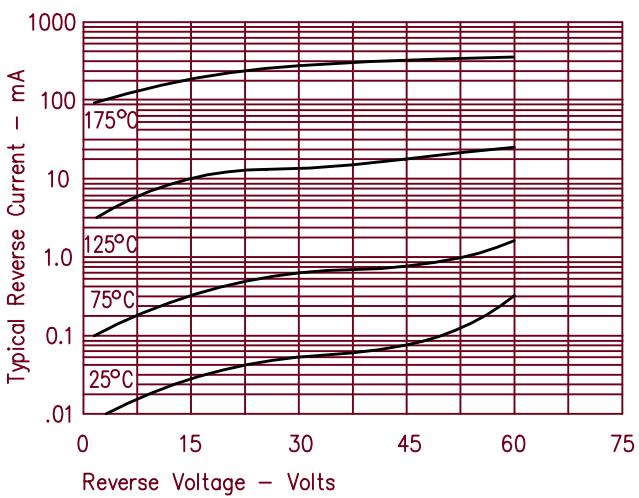


Figure 3

Typical Junction Capacitance – Per Leg

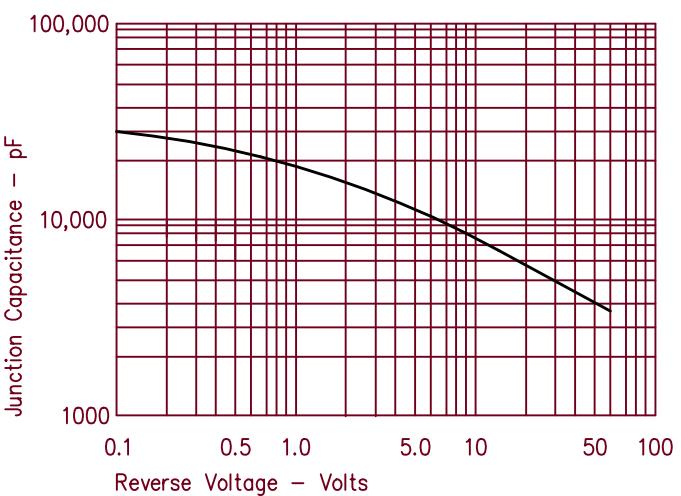


Figure 4

Forward Current Derating – Per Leg

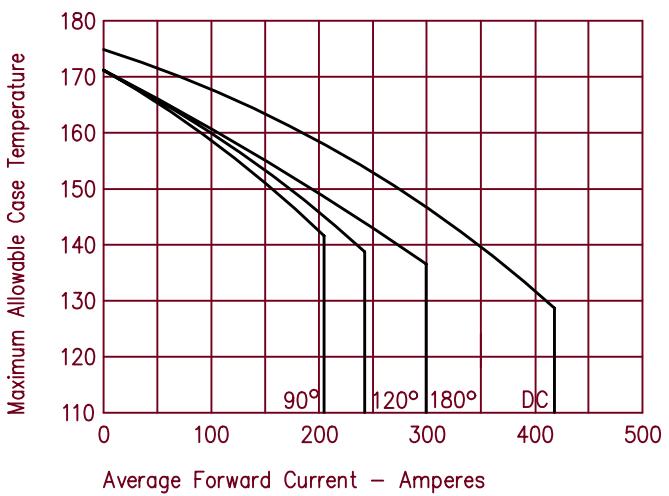


Figure 5

Maximum Forward Power Dissipation – Per Leg

