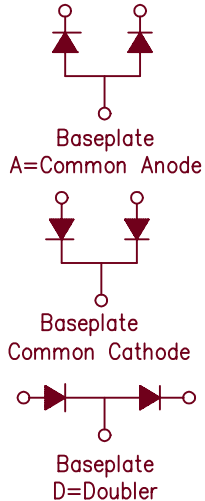
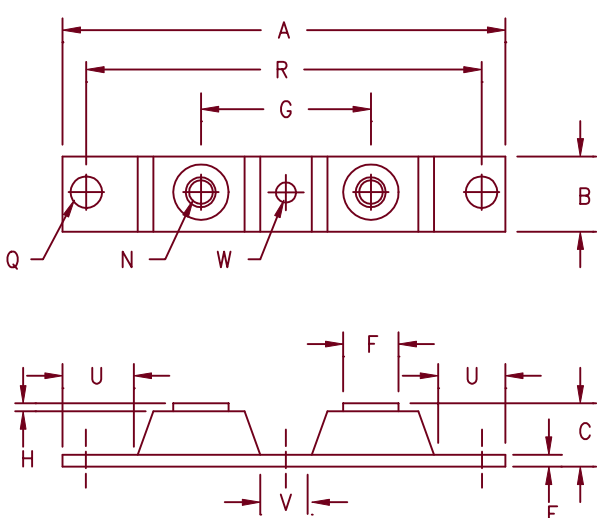


Schottky PowerMod CPT30060



| 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 | .340 | 7.92 | 8.64 | |
| W | 0.180 | 0.195 | 4.57 | 4.95 | Dia. |

Notes:
Baseplate: Nickel plated copper

| 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
- 300 Amperes/60 Volts
- 175°C Junction Temperature
- Reverse Energy Tested

Electrical Characteristics

| | | |
|--|-----------------|--|
| Average forward current per pkg | IF(AV) 300 Amps | TC = 127°C, Square wave, RθJC = 0.20°C/W TC = 127°C, Square wave, RθJC = 0.40°C/W |
| Average forward current per leg | IF(AV) 150 Amps | |
| Maximum surge current per leg | IFSM 2000 Amps | 8.3ms, half sine, TJ = 175°C |
| Maximum repetitive reverse current per leg | IR(OV) 2 Amps | f = 1 KHZ, 25°C, 1 μsec square wave |
| Max peak forward voltage per leg | VFM .82 Volts | IFM = 200A: TJ = 25°C* |
| Max peak forward voltage per leg | VFM .68 Volts | IFM = 200A: TJ = 175°C* |
| Max peak reverse current per leg | IRM 75 mA | VRRM, TJ = 125°C* |
| Max peak reverse current per leg | IRM 4.0 mA | VRRM, TJ = 25°C |
| Typical junction capacitance per leg | CJ 4300 pF | VR = 5.0V, TC = 25°C |

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

Thermal and Mechanical Characteristics

| | | |
|---|------|-------------------------------|
| Storage temp range | TSTG | -55°C to 175°C |
| Operating junction temp range | TJ | -55°C to 175°C |
| Max thermal resistance per leg | RθJC | 0.40°C/W Junction to case |
| Max thermal resistance per pkg | RθJC | 0.20°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) center hole must be torqued first | | 8-10 inch pounds |
| Weight | | 2.8 ounces (75 grams) typical |

CPT30060

Figure 1
Typical Forward Characteristics – Per Leg

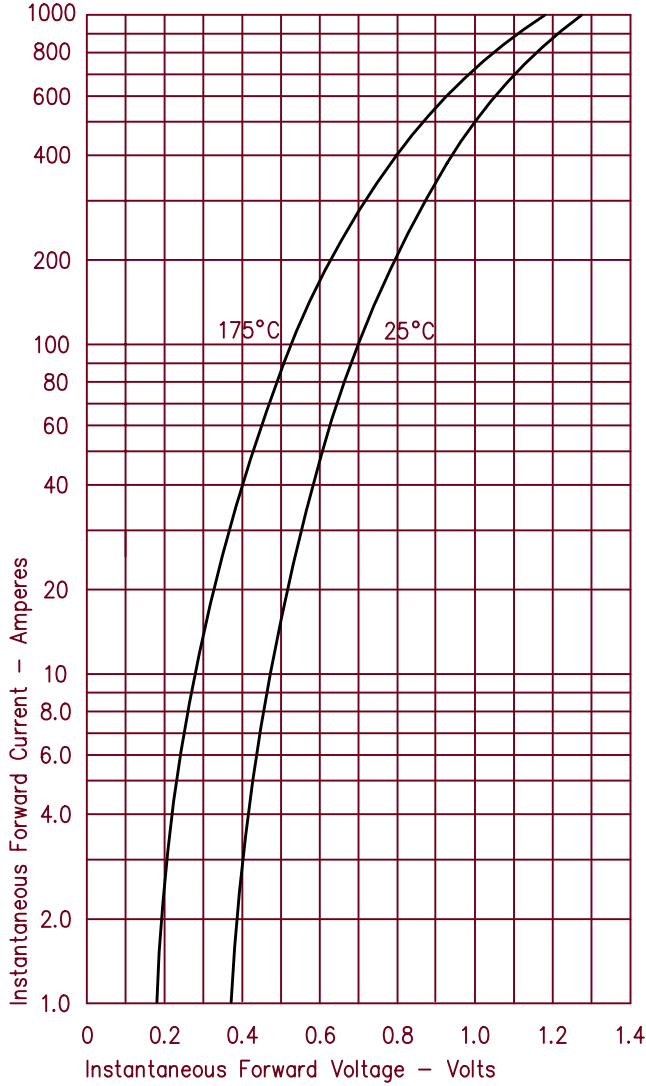


Figure 3
Typical Junction Capacitance – Per Leg

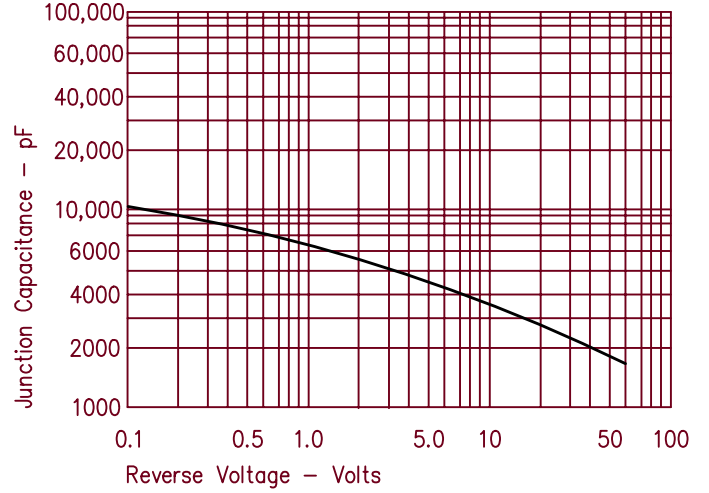


Figure 4
Forward Current Derating – Per Leg

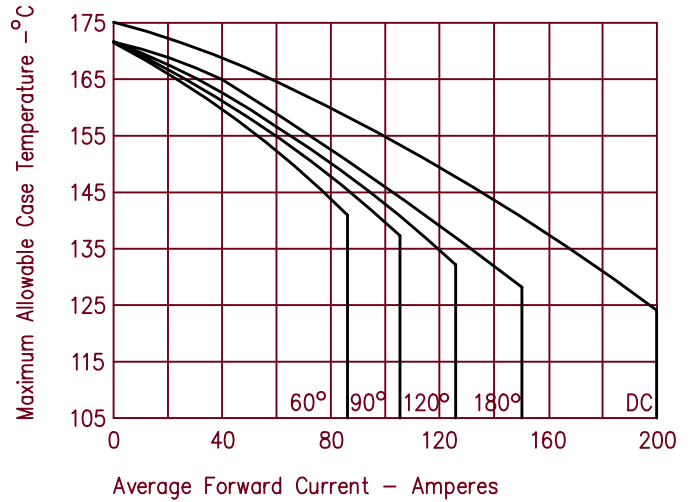


Figure 2
Typical Reverse Characteristics – Per Leg

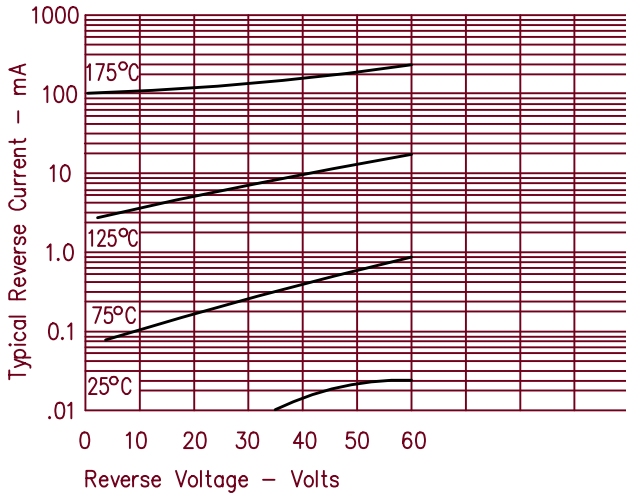


Figure 5
Maximum Forward Power Dissipation – Per Leg

