PINGWEI ENTERPRISE

# PS20U45BCT THRU PS20U150BCT

## 20.0AMPS. SCHOTTKY BARRIER RECTIFIERS

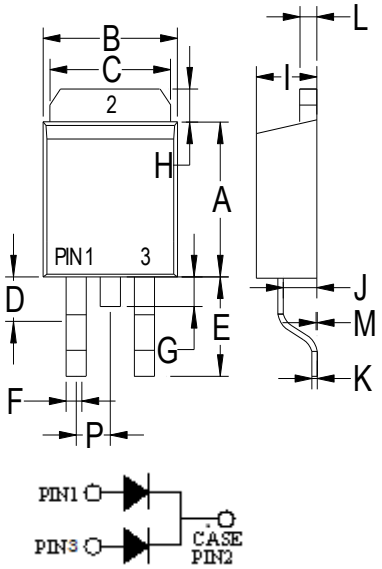
### FEATURE

. High current capability
. Low forward voltage drop
. Low power loss, high efficiency
. High surge capability
. High temperature soldering guaranteed
260°C /10seconds, 0.25"(6.35mm)from case.

### MECHANICAL DATA

. Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
. Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
. Mounting position: any

### TO-263




| Dim | Min | Max |
|---|---|---|
| A | .323(8.20) | .348(8.85) |
| B | .394(10.0) | .413(10.5) |
| C | .394(10.0) | .402(10.2) |
| D | .077(1.95) | .100(2.55) |
| E | .204(5.17) | .227(5.77) |
| F | .027(0.68) | .037(0.94) |
| G | -- | .067(1.70) |
| H | .046(1.17) | .053(1.34) |
| I | .175(4.44) | .191(4.86) |
| J | .100(2.54) | .110(2.79) |
| K | .014(0.35) | .025(0.64) |
| L | .047(1.20) | .055(1.40) |
| M | .000(0.00) | .010(0.25) |
| P | .095(2.41) | .105(2.67) |

Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load.
For capacitive load, derate current by 20%

| Type Number | SYMBOL | PS20 U45 BCT | PS20 U60 BCT | PS20 U100 BCT | PS20 U120 BCT | PS20 U150 BCT | units |
|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 45 | 60 | 100 | 120 | 150 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 32 | 42 | 70 | 84 | 105 | V |
| Maximum DC blocking Voltage | $V_{DC}$ | 45 | 60 | 100 | 120 | 150 | V |
| Maximum Average Forward Rectified Current at $T_C$ =100°C *Total device* | $I_{F(AV)}$ | 20.0 | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) *Per leg* | $I_{FSM}$ | 175.0 | | | | | A |
| Maximum Forward Voltage at 10.0A DC | $V_F$ | 0.50 | 0.60 | 0.70 | 0.83 | 0.90 | V |
| Maximum DC Reverse Current @$T_A$=25°C<br>at rated DC blocking voltage @$T_A$ =100°C | $I_R$ | 0.25<br>100.0 | | 0.2<br>80.0 | | | mA |
| Typical Junction Capacitance (Note 1) | $C_J$ | 700 | | 300 | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{(JC)}$ | 2.0 | | | | | ℃/W |
| Storage Temperature | $T_{STG}$ | -55 to +150 | | | | | ℃ |
| Operation JunctionTemperature | $T_J$ | -55 to +150 | | | | | ℃ |

**Note:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case Mounted on Heatsink