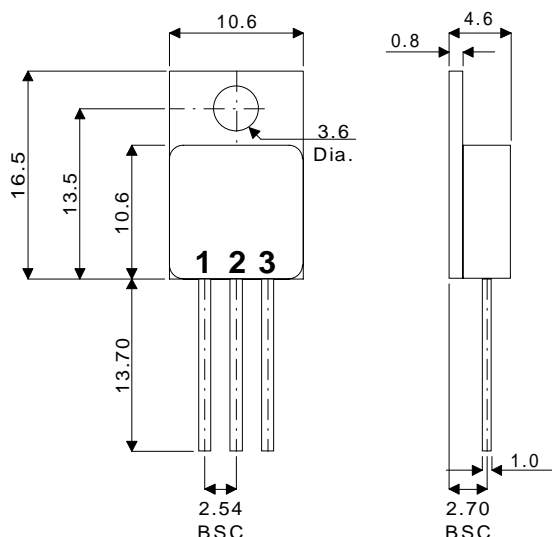


MECHANICAL DATA

Dimensions in mm



TO220 METAL PACKAGE

DUAL SCHOTTKY BARRIER DIODE IN TO220 METAL PACKAGE FOR HI-REL APPLICATIONS

FEATURES

- HERMETIC TO220 METAL PACKAGE
- ISOLATED CASE
- AVAILABLE IN COMMON CATHODE, COMMON ANODE AND SERIES

VERSIONS

- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 16A
- LOW V_F
- LOW LEAKAGE

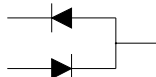
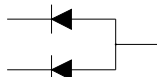
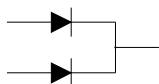
ELECTRICAL CONNECTIONS

Common Cathode Common Anode Series Connection

SB16-45M
SB16-40M

SB16-45AM
SB16-40AM

SB16-45RM
SB16-40RM



1 = A₁ Anode 1
2 = K Cathode
3 = A₂ Anode 2

1 = K₁ Cathode 1
2 = A Anode
3 = K₂ Cathode 2

1 = K₁ Cathode 1
2 = Centre Tap
3 = A₂ Anode

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

| | SB16-40M SB16-40AM SB16-40RM | SB16-45M SB16-45AM SB16-45RM |
|---|------------------------------------|------------------------------------|
| V _{RRM} Peak Repetitive Reverse Voltage | 40V | 45V |
| V _{RSM} Peak Non-Repetitive Reverse Voltage | 40V | 45V |
| V _R Continuous Reverse Voltage | 40V | 45V |
| I _O Output Current | 16A | |
| I _{FSM} Peak Non-Repetitive Surge Current (50Hz) | 245A | |
| T _{STG} Storage Temperature Range | -55°C to 150°C | |
| T _J Maximum Operating Junction Temperature | 150°C/W | |

ELECTRICAL CHARACTERISTICS (Per Diode) ($T_{CASE} = 25^{\circ}C$ unless otherwise stated)

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|----------------------------|--------------------------------------|------|------|------|---------|
| V_F Forward Voltage | $I_F = 8A$ $T_J = 150^{\circ}C$ | | | 0.6 | V |
| | $I_F = 16A$ $T_J = 25^{\circ}C$ | | | 0.8 | |
| I_R Reverse Current | $V_R = V_{RRM}$ $T_J = 150^{\circ}C$ | | | 30 | mA |
| | $V_R = V_{RRM}$ $T_J = 25^{\circ}C$ | | | 500 | μA |
| C_d Junction Capacitance | $V_R = 5 V$ $f = 1 MHz$ | | 500 | | pF |

Pulse test $t_p=300\mu s$ $\delta \leq 2\%$

| Parameter | | Unit |
|---|----------------------------------|---------------|
| $R_{TH(j-a)}$ Maximum Thermal Resistance Junction To Case | both diodes 1.4 per diode 2.3 | $^{\circ}C/W$ |
| $R_{TH(j-c)}$ Maximum Thermal Resistance Junction To Case | 1.3 | $^{\circ}C/W$ |