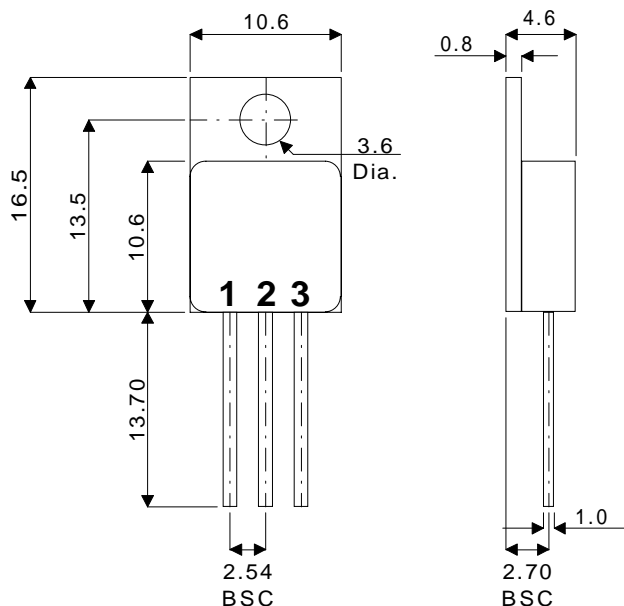


**MECHANICAL DATA**

Dimensions in mm



**TO220 METAL PACKAGE**

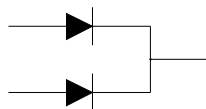
**DUAL SCHOTTKY  
BARRIER DIODE IN  
TO220 METAL PACKAGE  
FOR HI-REL APPLICATIONS**

**FEATURES**

- HERMETIC TO220 METAL PACKAGE
- ISOLATED CASE
- AVAILABLE IN COMMON CATHODE, COMMON ANODE AND SERIES VERSIONS
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 30A
- LOW  $V_F$
- LOW LEAKAGE

**Common Cathode**

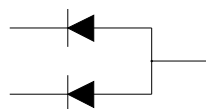
SB30-45M  
SB30-40M



1 = A<sub>1</sub> Anode 1  
2 = K Cathode  
3 = A<sub>2</sub> Anode 2

**Common Anode**

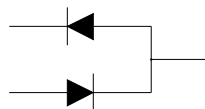
SB30-45AM  
SB30-40AM



1 = K<sub>1</sub> Cathode 1  
2 = A Anode  
3 = K<sub>2</sub> Cathode 2

**Series Connection**

SB30-45RM  
SB30-40RM



1 = K<sub>1</sub> Cathode 1  
2 = Centre Tap  
3 = A<sub>2</sub> Anode

**ABSOLUTE MAXIMUM RATINGS** ( $T_{case} = 25^{\circ}C$  unless otherwise stated)

	SB30-40M SB30-40AM SB30-40RM	SB30-45M SB30-45AM SB30-45RM
$V_{RRM}$ 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	30A	
$I_{FSM}$ 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	$I_F = 15A$ $T_J = 125^{\circ}C$			0.6	V
	$I_F = 20A$ $T_J = 25^{\circ}C$			0.8	
$I_R$ Reverse Current	$V_R = V_{RRM}$ $T_J = 100^{\circ}C$			30	mA
	$V_R = V_{RRM}$ $T_J = 25^{\circ}C$			500	$\mu A$
$C_d$ 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 $^{\circ}C/W$