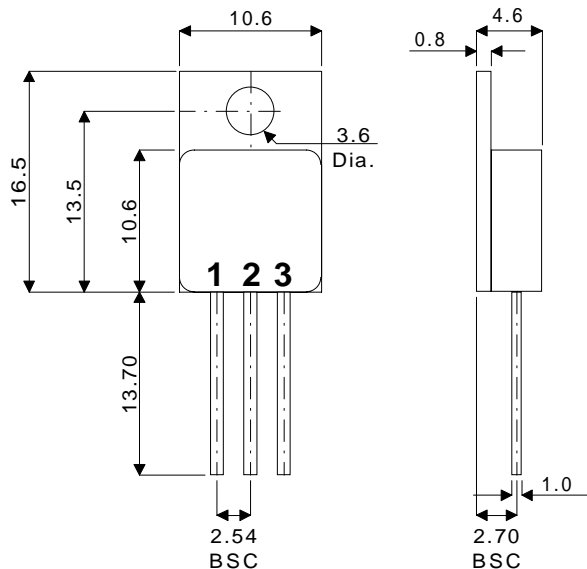


MECHANICAL DATA

Dimensions in mm



TO220 (TO-257AB) METAL PACKAGE

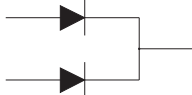
**DUAL SCHOTTKY
BARRIER DIODE IN
TO220 METAL PACKAGE
FOR HI-REL APPLICATIONS**

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

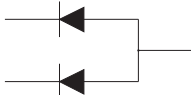
**SB30-45M
SB30-40M**



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

Common Anode

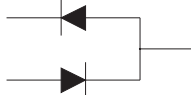
**SB30-45AM
SB30-40AM**



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

Series Connection

**SB30-45RM
SB30-40RM**

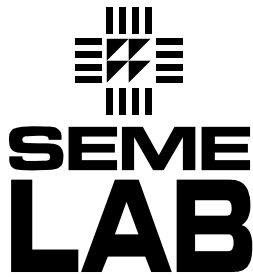


1 = K₁ Cathode 1
2 = Centre Tap
3 = A₂ Anode

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
$I_{F(AV)}$	Maximum Average Forward Current	30A	
I_{FSM}	Peak Non-Repetitive Surge Current at 50Hz (per leg)	245A	
T_{STG}	Storage Temperature Range	-55°C to 150°C	
T_J	Maximum Operating Junction Temperature	150°C	

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.



SB30-45M
SB30-45AM
SB30-45RM

SB30-40M
SB30-40AM
SB30-40RM

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

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
V_F	Maximum Forward Voltage Drop (per leg)*	$I_F = 15A$	$T_J = 25^{\circ}C$			0.6	V
		$I_F = 20A$	$T_J = 25^{\circ}C$			0.7	
		$I_F = 15A$	$T_J = 125^{\circ}C$			0.7	
		$I_F = 20A$	$T_J = 125^{\circ}C$			0.8	
I_R	Reverse Maximum Leakage Current*	$V_R = V_{RRM}$	$T_J = 25^{\circ}C$			500	μA
		$V_R = V_{RRM}$	$T_J = 125^{\circ}C$			30	mA
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
$R_{TH(j-c)}$	Maximum Thermal Resistance Junction To Case	(per package)	1.3 $^{\circ}C/W$
$R_{TH(j-c)}$	Maximum Thermal Resistance Junction To Case	(per leg)	2.4 $^{\circ}C/W$

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