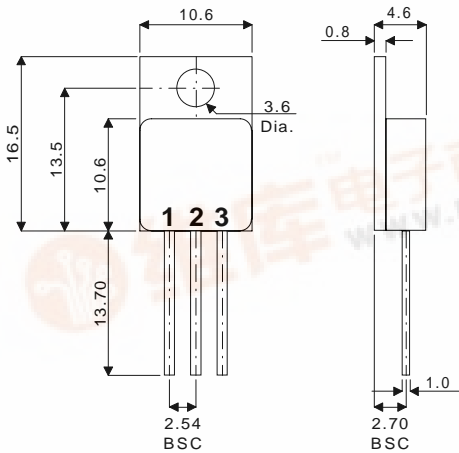




BYV143-40M BYV143-45M
 BYV143-40AM BYV143-45AM
 BYV143-40RM BYV143-45RM

MECHANICAL DATA

Dimensions in mm



TO220 METAL PACKAGE

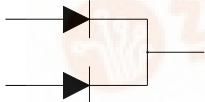
**DUAL SCHOTTKY
 BARRIER DIODE
 IN TO220 METAL PACKAGE
 FOR HI-REL APPLICATIONS**

FEATURES

- HERMETIC TO220 METAL PACKAGE
- ISOLATED CASE
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 30A
- LOW V_F ($V_F < 0.6V$)
- LOW LEAKAGE

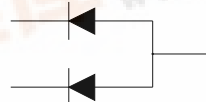
Common Cathode Common Anode Series Connection

BYV143-xxM



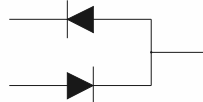
1 = A_1 Anode 1
 2 = K Cathode
 3 = A_2 Anode 2

BYV143-xxAM



1 = K_1 Cathode 1
 2 = A Anode
 3 = K_2 Cathode 2

BYV143-xxRM

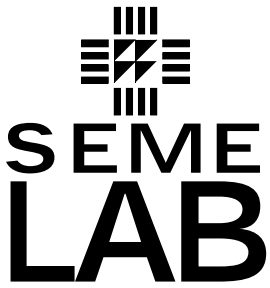


1 = K_1 Cathode 1
 2 = Centre Tap
 3 = A_2 Anode

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

	BYV143-40M	BYV143-45M
V_{RRM} Peak Repetitive Reverse Voltage	40V	45V
V_{RWM} Crest Working Reverse Voltage	40V	45V
V_R Continuous Reverse Voltage	40V	45V
I_O Output Current ($\delta = 0.5$)		30A
$I_{F(RMS)}$ Forward RMS Current		40A
I_{FRM} Repetitive Peak Forward Current		250A
I_{FSM} Non Repetitive Peak Forward Current (per diode) $t = 10$ ms		200A
I_{FSM} Non Repetitive Peak Forward Current (per diode) $t = 8.3$ ms		220A
I^2T I^2T for fusing (per diode) $t = 10$ ms		200A ² s
I_{RRM} Reverse Surge Current $t_p = 2 \mu s$ $\delta = 0.001$		2A
I_{RSM} Reverse Surge Current $t_p = 100 \mu s$		2A
Storage Temperature Range		-65 to 150°C
Maximum Operating Junction Temperature		150°C





BYV143-40M **BYV143-45M**
BYV143-40AM **BYV143-45AM**
BYV143-40RM **BYV143-45RM**

ELECTRICAL CHARACTERISTICS (Per Diode)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
V _F	Forward Voltage	I _F = 15A	T _j = 150°C			0.6	V
		I _F = 20A	T _j = 25°C			0.8	V
I _R	Reverse Current	V _R = V _{RWM} (Max)	T _j = 125°C			30	mA
		V _R = V _{RWM} (Max)	T _j = 25°C			500	μA
C _d	Junction Capacitance	V _R = 5 V	f = 1 MHz		500		pF

THERMAL CHARACTERISTICS

Parameter			Min.	Typ.	Max.	Unit
R _{θJC}	Thermal Resistance Junction to Case	(Both Diodes)			1.4	°C / W
		(Per Diode)			2.3	
R _{θJA}	Thermal Resistance Junction to Ambient				60	