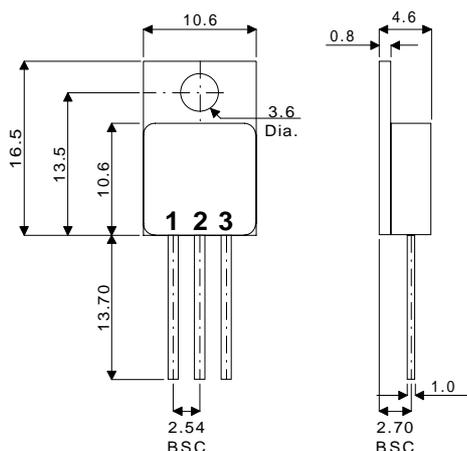


MECHANICAL DATA

Dimensions in mm



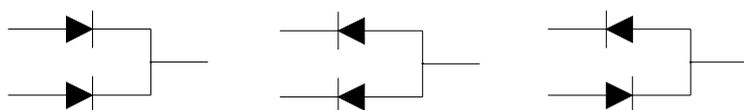
TO220 METAL PACKAGE

**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 **BYV143-xxAM** **BYV143-xxRM**



1 = A₁ Anode 1 **1 = K₁ Cathode 1** **1 = K₁ Cathode 1**
2 = K Cathode **2 = A Anode** **2 = Centre Tap**
3 = A₂ Anode 2 **3 = K₂ Cathode 2** **3 = A₂ 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	$200A^2s$
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
T_{stg}	Storage Temperature Range	-65 to 150°C	
T_j	Maximum Operating Junction Temperature	150°C	

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	