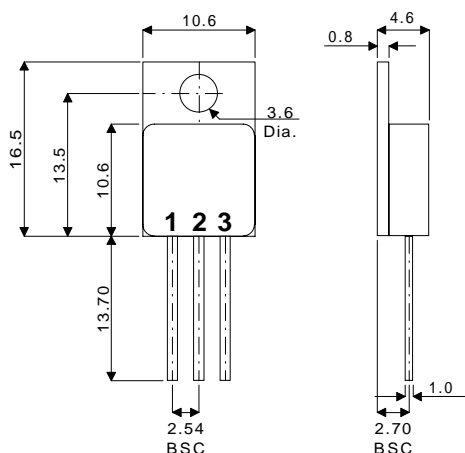


MECHANICAL DATA

Dimensions in mm



TO220 METAL PACKAGE

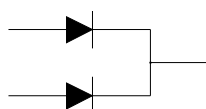
DUAL SCHOTTKY BARRIER DIODE IN TO220 METAL PACKAGE FOR HI-REL APPLICATIONS

FEATURES

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

Common Cathode

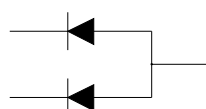
BYV143-xxM



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

Common Anode

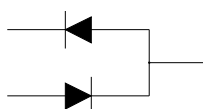
BYV143-xxAM



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

Series Connection

BYV143-xxRM



1 = K₁ Cathode 1
2 = Centre Tap
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	$t_p = 2$ μs $\delta = 0.001$	2A
I_{RSM}	Reverse Surge Current	$t_p = 100$ μs	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	