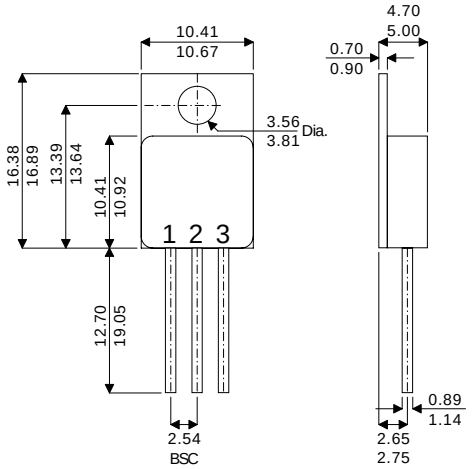
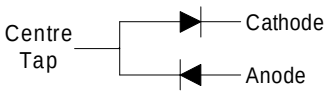
BYV32–50–XM / XTM
BYV32–100–XM / XTM
BYV32–150–XM / XTM
BYV32–200–XM / XTM

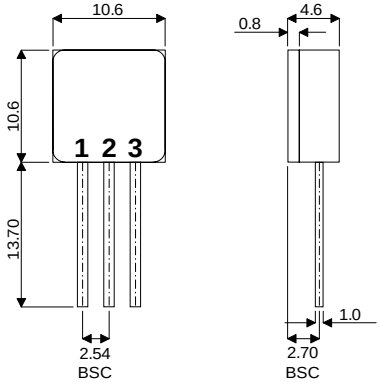
MECHANICAL DATA
Dimensions in mm



TO–220XM

Pin 1 – Anode
Pin 2 – Centre Tap
Pin 3 – Cathode





TO–220TXM

Pin 1 – Anode
Pin 2 – Centre Tap
Pin 3 – Cathode

HERMETICALLY SEALED DUAL FAST RECOVERY SILICON RECTIFIER FOR HI–REL APPLICATIONS

- **Reverse Connected version of BYV32–xxx RM product**
- **Tab TO–220M (Isolated) (XM) and Tabless (TXM) package options**

FEATURES

- **HERMETIC TO220 METAL PACKAGE**
- **SCREENING OPTIONS AVAILABLE**
- **ALL LEADS IOLATED FROM CASE**
- **VOLTAGE RANGE 50 TO 200V**
- **AVERAGE CURRENT 20A**
- **VERY LOW REVERSE RECOVERY TIME – t_{rr} = 35ns**
- **VERY LOW SWITCHING LOSSES**

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)			**BYV32 –50M**	**BYV32 –100M**	**BYV32 –150M**	**BYV32 –200M**
V_{RRM}	Peak Repetitive Reverse Voltage		50V	100V	150V	200V
V_{RWM}	Working Peak Reverse Voltage		50V	100V	150V	200V
V_R	Continuous Reverse Voltage		50V	100V	150V	200V
I_{FRM}	Repetitive Peak Forward Current	t_p = 10µs	200A			
$I_{F(AV)}$	Average Forward Current	T_{case} = 70°C	20A			
	(switching operation, δ = 0.5, both diodes conducting)					
I_{FSM}	Surge Non Repetitive Forward Current	t_p = 10 ms	80A			
T_{stg}	Storage Temperature Range		–65 to 200°C			
T_j	Maximum Operating Junction Temperature		200°C			

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BYV32–150–XM / XTM
BYV32–200–XM / XTM

ELECTRICAL CHARACTERISTICS (Per Diode) (T_{case} = 25°C unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
I_R	Reverse Current	$V_R = V_{RWM}$	T_j = 25°C			30	µA
		$V_R = V_{RWM}$	T_j = 100°C			0.6	mA
V_F *	Forward Voltage	I_F = 8A	T_C = 25°C			1.1	V
		I_F = 20A	T_C = 25°C			1.5	
		I_F = 5A	T_C = 100°C			0.95	
t_{rr}	Reverse Recovery Time	I_F = 2A di / dt = 20A/µs	V_R = 30V			35	ns
		I_F = 1A di / dt = 50A/µs	V_R = 30V			50	ns
Q_{rr}	Recovered Charge	I_F = 2A di / dt = 20A/µs	V_R = 30V			15	nC
V_{FP}	Forward Recovery Overvoltage	di / dt = 50A/µs	I_F = 1A		1.0		V

* Pulse Test: $t_p \leq 300\mu s$, duty cycle ≤ 2%.

THERMAL CHARACTERISTICS

$R_{\theta JC}$†	Thermal Resistance Junction – Case				1.6	°C/W

† Both diodes conducting.