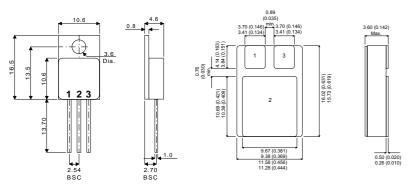


BYV32-50M BYV32-100M BYV32-150M BYV32-200M

MECHANICAL DATA

Dimensions in mm

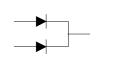


TO220 METAL

SMD1 **CERAMIC SURFACE MOUNT**

ELECTRICAL CONNECTIONS

Common Cathode **Common Anode Series Connection** BYV32-xxxAM



BYV32-xxxM

1 = A₁ Anode 1 2 = K Cathode

3 = A₂ Anode 2

1 = K₁ Cathode 1 2 = A Anode

3 = K₂ Cathode 2

BYV32-xxxRM



1 = K₁ Cathode 1 2 = Centre Tap

 $3 = A_2$ Anode

HERMETICALLY SEALED **DUAL FAST RECOVERY** SILICON RECTIFIER FOR HI-REL APPLICATIONS

- STANDARD (COMMON CATHODE)
- COMMON ANODE
- SERIES CONNECTION

FEATURES

- HERMETIC TO220 METAL OR CERAMIC SURFACE MOUNT 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

Applications include secondary rectification in high frequency switching power supplies.

ABSOLUTE MAXIMUM RATINGS (T _{case} = 25°C unless otherwise stated)		BYV32	BYV32	BYV32	BYV32			
		-50M	-100M	-150M	-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	$t_p = 10\mu s$	200A					
$I_{F(AV)}$	Average Forward Current	$T_{case} = 70^{\circ}C$	20A					
	(switching operation, δ = 0.5, both diodes conducting)							
I_{FSM}	Surge Non Repetitive Forward Current	$t_p = 10 \text{ ms}$	80A					
T_{stg}	Storage Temperature Range		−65 to 200°C					
T_j	Maximum Operating Junction Tempera	ximum Operating Junction Temperature		200°C				

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BYV32-50M BYV32-100M BYV32-150M BYV32-200M

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

Parameter		Test Conditions		Min.	Тур.	Max.	Unit
	Reverse Current	$V_R = V_{RWM}$	T _j = 25°C			30	μΑ
I _R	Reverse Currelli	$V_R = V_{RWM}$	T _j = 100°C			0.6	mA
		I _F = 8A	T _C = 25°C			1.1	
V _F *	Forward Voltage	I _F = 20A	$T_C = 25^{\circ}C$			1.5	V
		I _F = 5A	T _C = 100°C			0.95	
t _{rr}		I _F = 2A	V _R = 30V			35	ns
	Reverse Recovery Time	di / dt = 20A/μs				33	115
		I _F = 1A	V _R = 30V			50	ne
		di / dt = 50A/μs				30	ns
Q _{rr}	Recovered Charge	I _F = 2A	V _R = 30V			15	nC
		di / dt = 20A/μs				15	IIC
V _{FP}	Forward Recovery Overvoltage	di / dt = 10A/μs	I _F = 1A		1.0		V

^{*} Pulse Test: $t_p \le 300 \mu s$, duty cycle $\le 2\%$.

THERMAL CHARACTERISTICS (TO220 METAL CASE)

$R_{\theta JC}$ †	Thermal Resistance Junction – Case			1.6	°C/W	
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[†] Both diodes conducting.

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