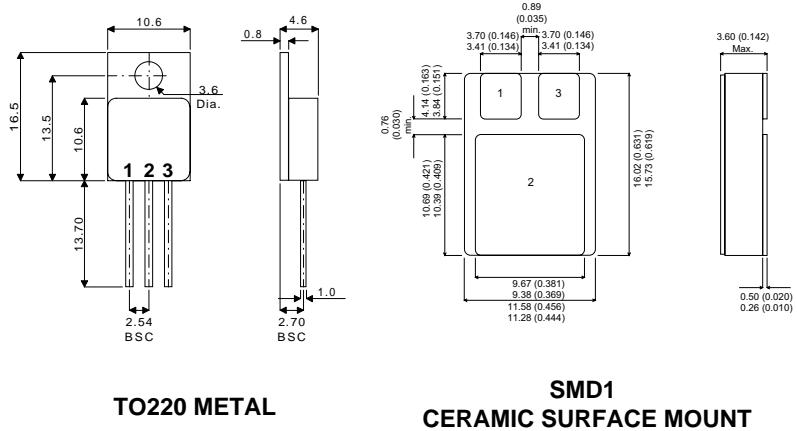




SEME LAB

MECHANICAL DATA

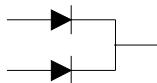
Dimensions in mm



ELECTRICAL CONNECTIONS

Common Cathode

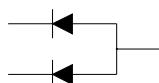
BYV32-xxxM



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

Common Ano

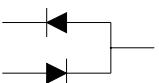
BYV32-xxxAM



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

Series Connection

BYV32-xxxRM



1 = K₁ Cathode 1
2 = Centre Tap
3 = A₂ Anode

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

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

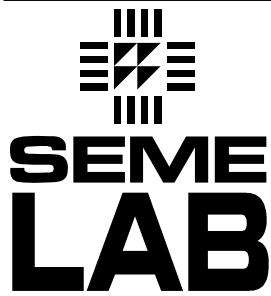
FEATURES

- HERMETIC TO220 METAL OR CERAMIC SURFACE MOUNT PACKAGE
- SCREENING OPTIONS AVAILABLE
- ALL LEADS ISOLATED FROM CASE
- VOLTAGE RANGE 50 TO 200V
- AVERAGE CURRENT 20A
- VERY LOW REVERSE RECOVERY TIME –
 $t_{rr} = 35\text{ns}$
- VERY LOW SWITCHING LOSSES

Applications include secondary rectification in high frequency switching power supplies.

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

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 (switching operation, δ = 0.5, both diodes conducting)			20A
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



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

ELECTRICAL CHARACTERISTICS (Per Diode) ($T_{case} = 25^\circ C$ unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
I_R	Reverse Current	$V_R = V_{RWM}$	$T_j = 25^\circ C$			30	μA mA
		$V_R = V_{RWM}$	$T_j = 100^\circ C$			0.6	
V_F *	Forward Voltage	$I_F = 8A$	$T_C = 25^\circ C$			1.1	V
		$I_F = 20A$	$T_C = 25^\circ C$			1.5	
		$I_F = 5A$	$T_C = 100^\circ C$			0.95	
t_{rr}	Reverse Recovery Time	$I_F = 2A$ $di / dt = 20A/\mu s$	$V_R = 30V$			35	ns ns
		$I_F = 1A$ $di / dt = 50A/\mu s$	$V_R = 30V$			50	
Q_{rr}	Recovered Charge	$I_F = 2A$ $di / dt = 20A/\mu s$	$V_R = 30V$			15	nC
V_{FP}	Forward Recovery Overvoltage	$di / dt = 10A/\mu s$	$I_F = 1A$		1.0		V

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

THERMAL CHARACTERISTICS (TO220 METAL CASE)

$R_{\theta JCT}$	Thermal Resistance Junction – Case			1.6	$^\circ C/W$
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† Both diodes conducting.