

**30 AMPERES SCHOTTKY BARRIER RECTIFIERS**

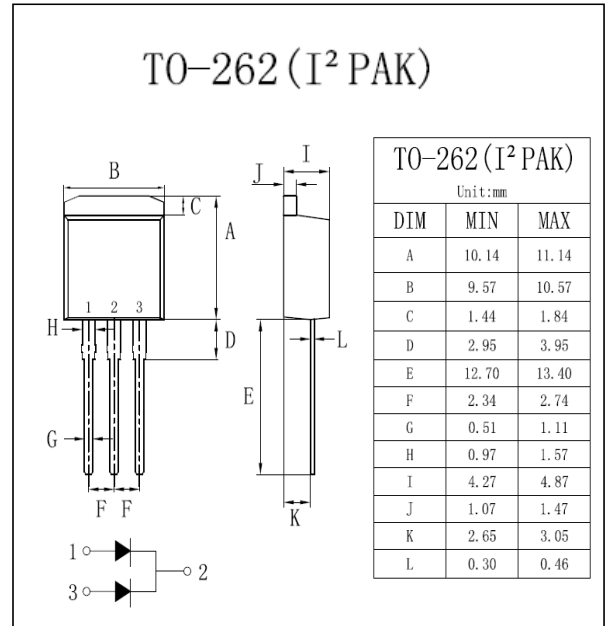
<b>VOLTAGE</b>	40 to 200 Volts
<b>CURRENT</b>	30 Amperes

**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- Case: TO-262AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any


**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR 3040CKD	MBR 3045CKD	MBR 3050CKD	MBR 3060CKD	MBR 3080CKD	MBR 3090CKD	MBR 30100CKD	MBR 30150CKD	MBR 30200CKD	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	90	100	150	200	V	
Maximum RMS Voltage	$V_{RMS}$	28	31.5	35	42	56	63	70	105	140	V	
Maximum DC Blocking Voltage	$V_{DC}$	40	45	50	60	80	90	100	150	200	V	
Maximum Average Forward Current	$I_{F(AV)}$	30									A	
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200									A	
Maximum Forward Voltage at 15A per leg	$V_F$	0.7		0.8		0.85			0.92		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	0.05					20					mA
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C / W	
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150							-55 to + 175		°C	

## RATING AND CHARACTERISTIC CURVES

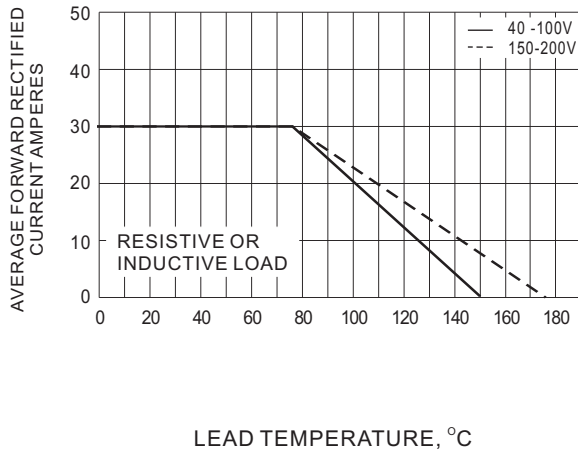


Fig.1- FORWARD CURRENT DERATING CURVE

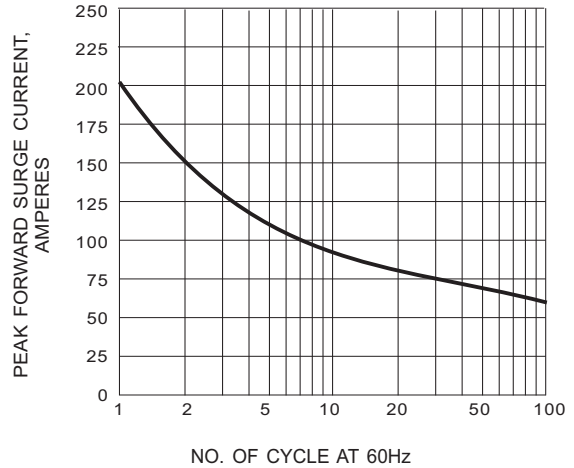


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

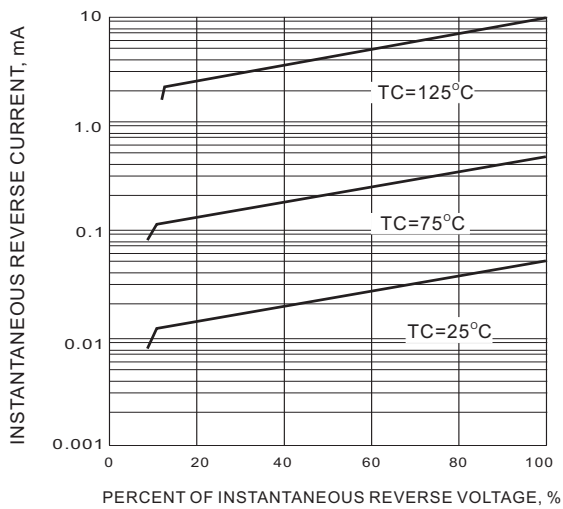


Fig.3- TYPICAL REVERSE CHARACTERISTIC

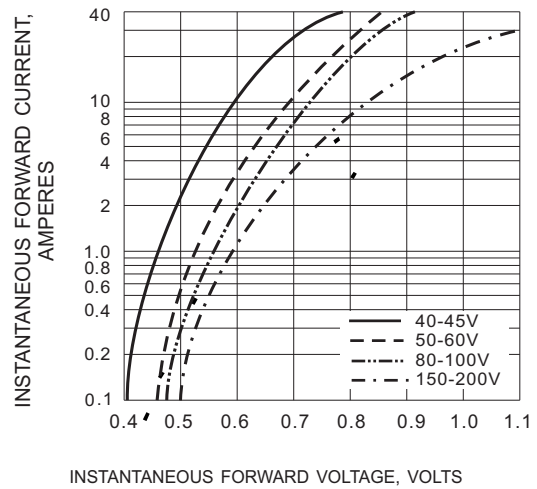


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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