

TO-262(I²PAK) SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

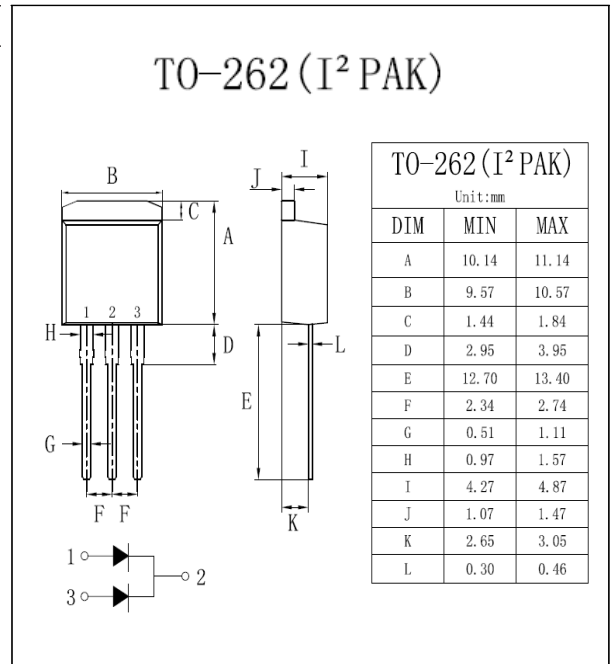
VOLTAGE	40 to 200 Volts
CURRENT	20 Amperes

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

MECHANICAL DATA

- Case: I2PAK molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

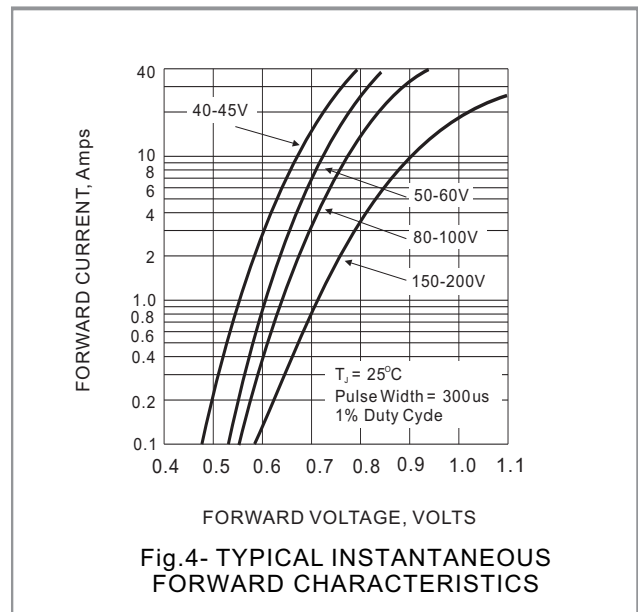
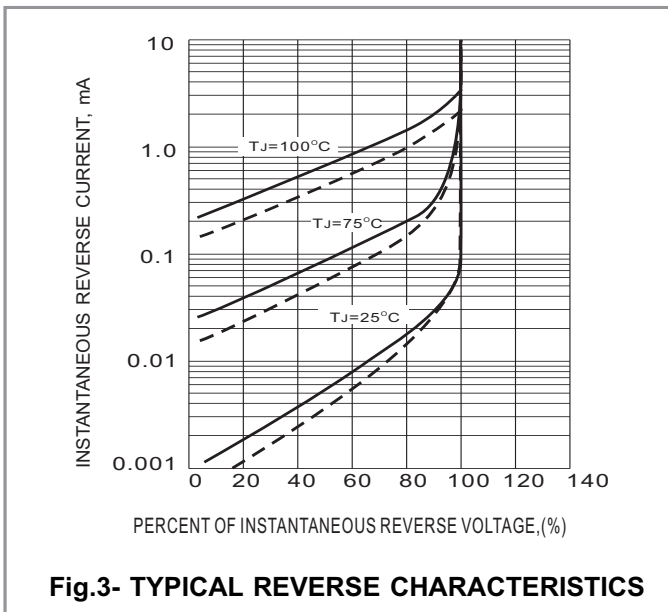
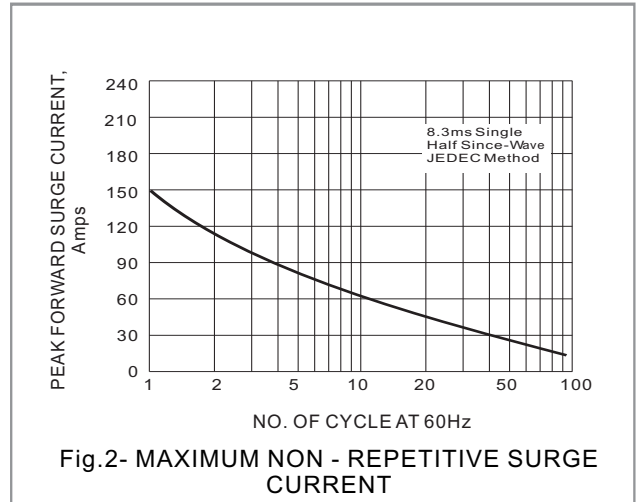
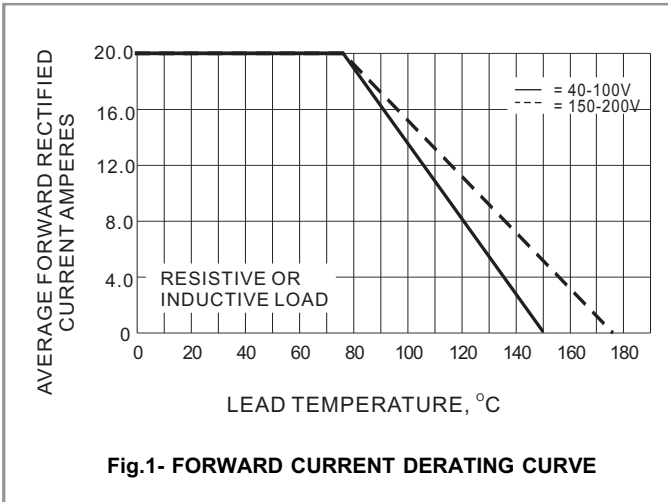

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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 2040CKD	MBR 2045CKD	MBR 2050CKD	MBR 2060CKD	MBR 2080CKD	MBR 2090CKD	MBR 20100CKD	MBR 20150CKD	MBR 20200CKD	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 (See fig.1)	$I_{F(AV)}$	20									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150									A
Maximum Forward Voltage at 10A, per leg	V_F	0.7		0.8		0.85		0.92			V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	I_R	0.05 20				0.02 20					mA
Typical Thermal Resistance	$R_{\theta JC}$	3									°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 to + 150							-55 to +175		°C

RATING AND CHARACTERISTIC CURVES



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