



VOLTAGE RANGE: 40 - 200 V

CURRENT: 20 A

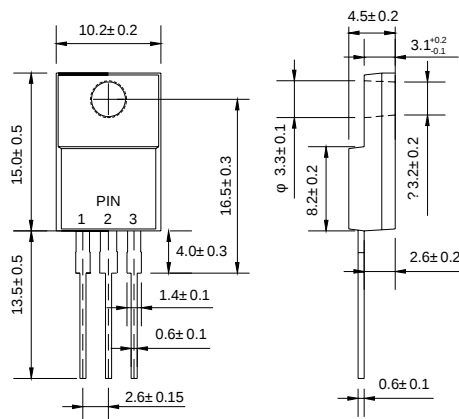
ITO-220AB

Features

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

Mechanical Data

- ◇ Case: JEDEC ITO-220AB, molded plastic body
- ◇ Polarity: As marked
- ◇ Position: Any
- ◇ Weight: 0.06 ounce, 1.67 grams



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	MBRF 2040CT	MBRF 2045CT	MBRF 2050CT	MBRF 2060CT	MBRF 2080CT	MBRF 2090CT	MBRF 20100CT	MBRF 20150CT	MBRF 20200CT	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 °C at Rated DC Blocking Voltage T _J =125°C	I _R	0.05 20				0.02 20				mA	
Typical Thermal Resistance	R _{θJC}	2									°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-50 to + 150							-55 to +175		°C

RATING AND CHARACTERISTIC CURVES

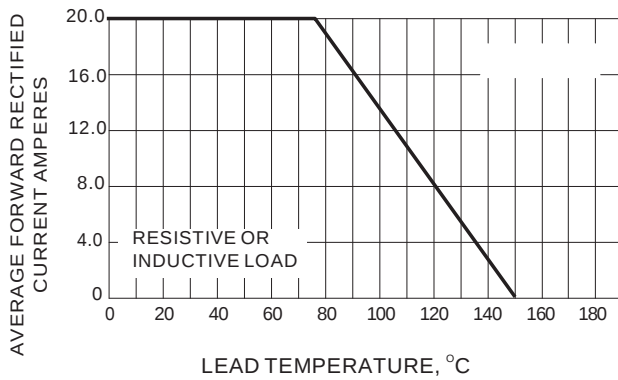


Fig.1- FORWARD CURRENT DERATING CURVE

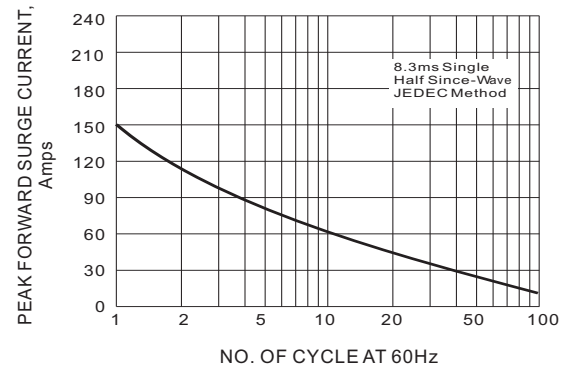


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

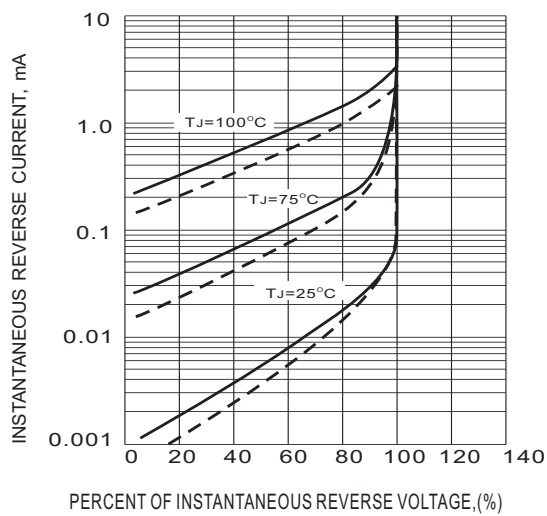


Fig.3- TYPICAL REVERSE CHARACTERISTICS

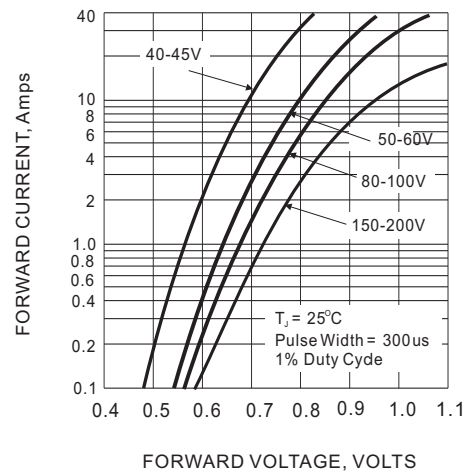


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS