

DATA SHEET

MBR30100FCT SERIES

DUAL SCHOTTKY BARRIER RECTIFIER

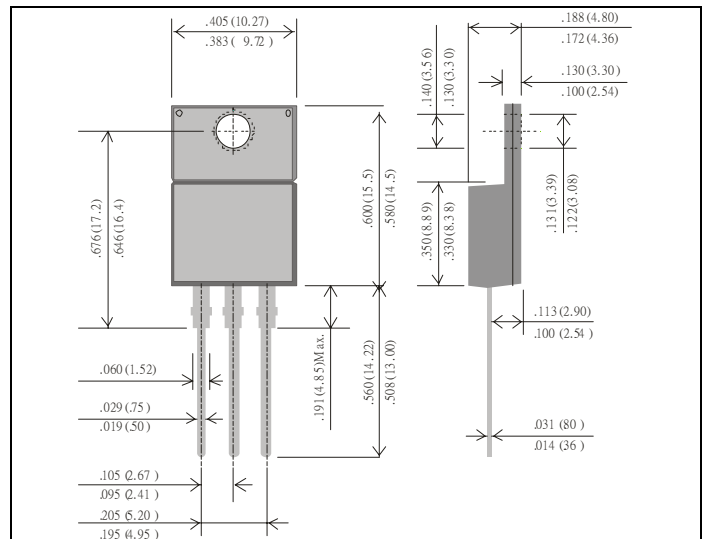
VOLTAGE 100~200 Volts **CURRENT** 30 Ampere

FEATURES

- EXTREMELY LOW V_F
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND

MECHANICAL DATA

- CASE : TRANSFER MOLDED
- LEADS : SOLDERABLE PER MIL-STD-202,METHOD 208
- POLARITY : AS MARKED
- WEIGHT : 2.24 GRAMS



CASE : ITO-220AB

DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

R RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	MBR30100FCT	MBR30120FCT	MBR30150FCT	MBR30200FCT	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	100	120	150	200	V
MAXIMUM RMS VOLTAGE	V_{RMS}	70	84	105	140	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	100	120	150	200	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT PER LEG (SEE FIG.1)	I_O	30				A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	200				A
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO +150				°C
OPERATING TEMPERATURE RANGE	T_J	-55 TO +150				°C
TYPICAL THERMAL RESISTANCE	$R_{\theta JC}$	2.2				°C/W

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	MBR30100FCT	MBR30120FCT	MBR30150FCT	MBR30200FCT	UNITS
MAXIMUM FORWARD VOLTAGE AT 15A PER LEG	V_F	0.85	0.87	0.90	0.92	V
MAXIMUM DC REVERSE CURRENT AT $T_A = 25^\circ\text{C}$ (NOTE 1)	I_R	0.1				mA

NOTES : 1. PULSE TEST: 300μS PULSE WIDTH, 1% DUTY CYCLE

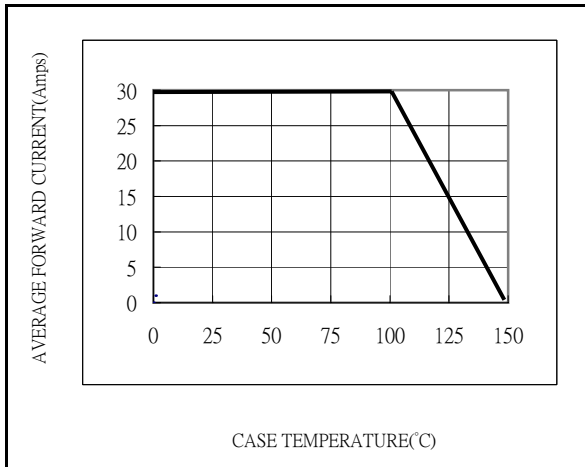


Fig.1-FORWARD CURRENT DERATING CURVE

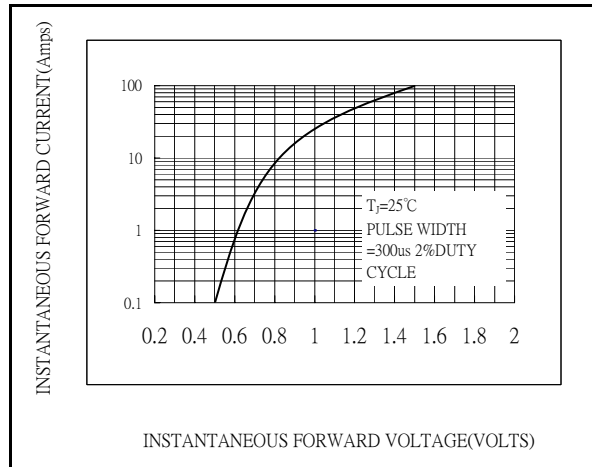


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

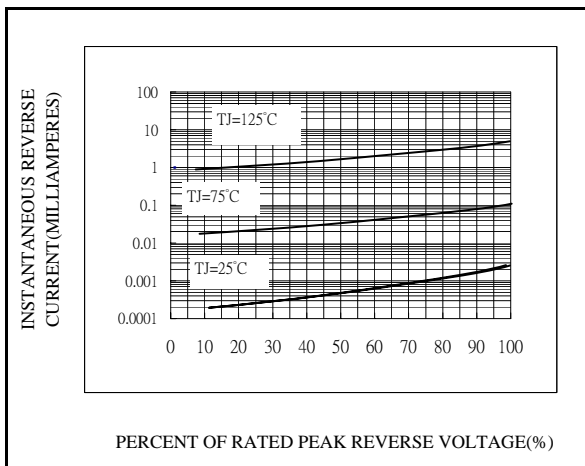


Fig.3-TYPICAL REVERSE CHARACTERISTICS

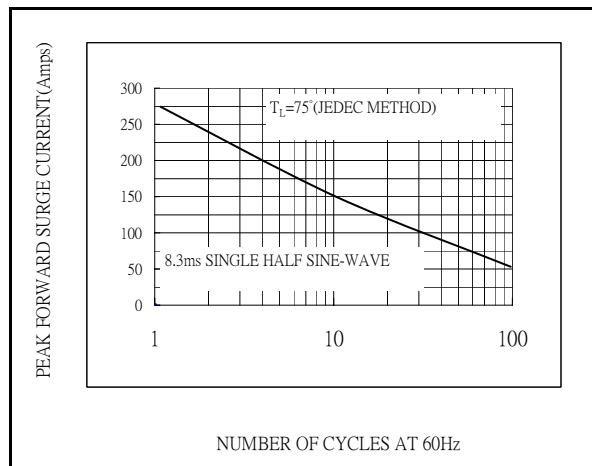


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT