MBR1540FCT~MBR15200FCT

15 AMPERES SCHOTTKY BARRIER RECTIFIERS

DRAWING

Voltage	40 to 200 Volts	Current	15 Amperes

Features

◈ Plastic package has underwriters laboratory

Flammability classification 94v-O.

Flame retardant epoxy molding compound.

◈ Metal silicon junction, majority carrier condition.

◈ Low power loss, high efficiency.

◈ High current capability

◈ Guarding for over voltage protection

◈ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.

◈ In compliance with EU ROHS 2002/95/EC directives.

◈ Case: ITO-220AB

Maximum ratings and Electrical Characteristics

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

For capacitive load, derate current by 20%.

PARAMETER	Symbol	MBR1540FCT	MBR1545FCT	MBR1550FCT	MBR1560FCT	MBR15100FCT	MBR15150FCT	MBR15200FCT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	40	45	50	60	100	150	200	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	15							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120							A
Maximum Forward Voltage at 7.5A,per leg	V_F	0.7		0.75		0.8	0.9		V
Macimum DC Reverse Current TJ=25℃ at Rated DC Blocking Voltage TJ=125℃	I_R	0.2 / 50							mA
Typical Thermal Resistance	$R_{\theta jc}$	2							℃/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 to +150	-65 to +175						℃

Typical Characteristics

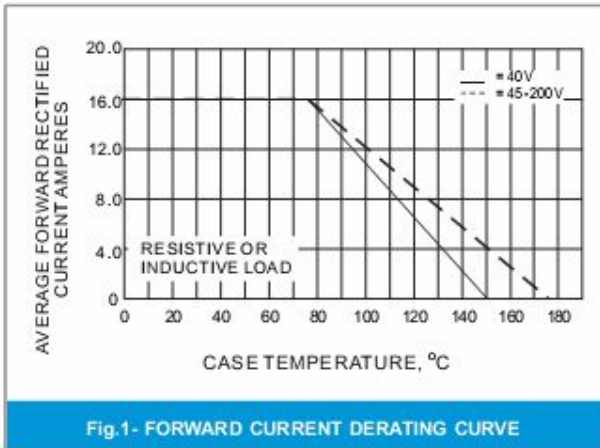## RATING AND CHARACTERISTIC CURVES

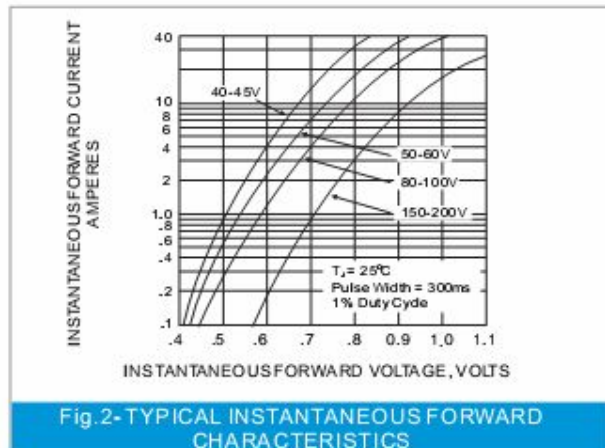Fig.1- FORWARD CURRENT DERATING CURVE

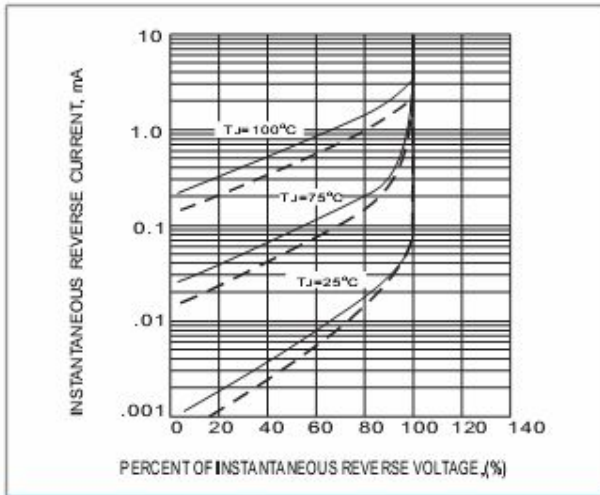Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS
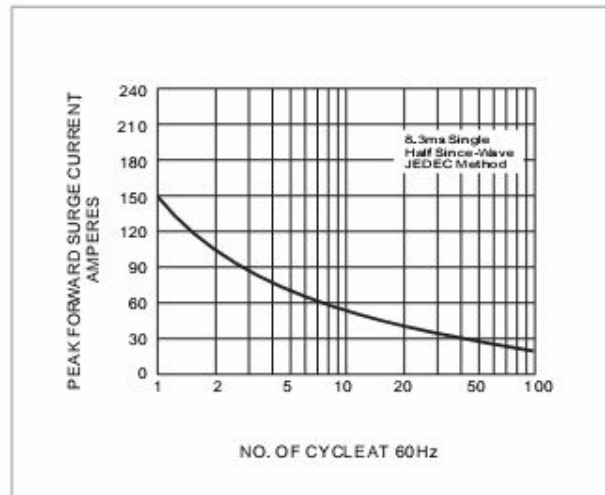

Fig.3- TYPICAL REVERSE CHARACTERISTICS

Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT

Typical Characteristics