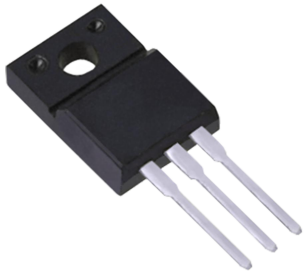
SCHOTTKY BARRIER RECTIFIERS

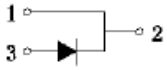
VOLTAGE	20 to 200 Volts
CURRENT	5 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS

TO-220F





MECHANICALDATA

- Case: TO-220F molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: As marking

MAXIMUM RATINGS

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	MBRF 520CT	MBRF 540CT	MBRF 545CT	MBRF 550CT	MBRF 560CT	MBRF 580CT	MBRF 5100CT	MBRF 5150CT	MBRF 5200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	50	60	80	100	150	200	V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	5									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 5.0A per leg	V_F	0.60			0.70		0.85		0.90	0.92	V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltag T_J=100°C	I_R	0.2 2									mA
Typical Thermal Resistance Note 1	$R_{\theta JC}$	60									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +125			-55 to +150						°C

Note 1: Mounted on FR-4 PCB Copper, minimum recommended pad layout

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

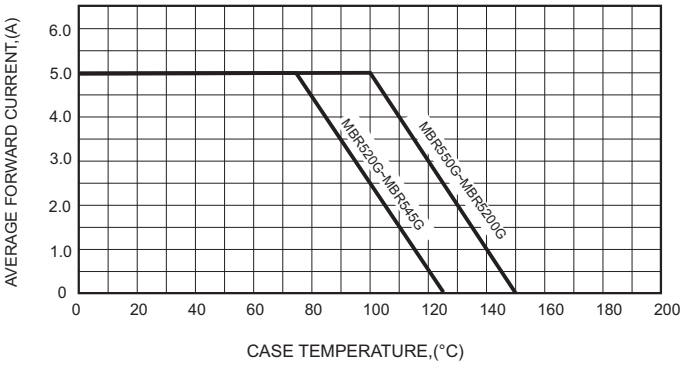


FIG.2-TYPICAL FORWARD CHARACTERISTICS

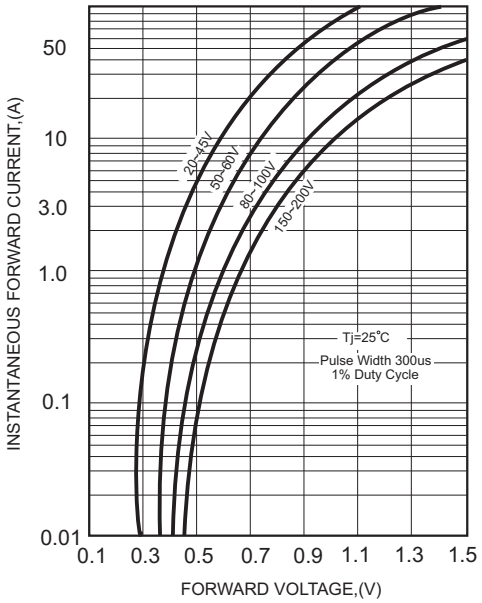


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

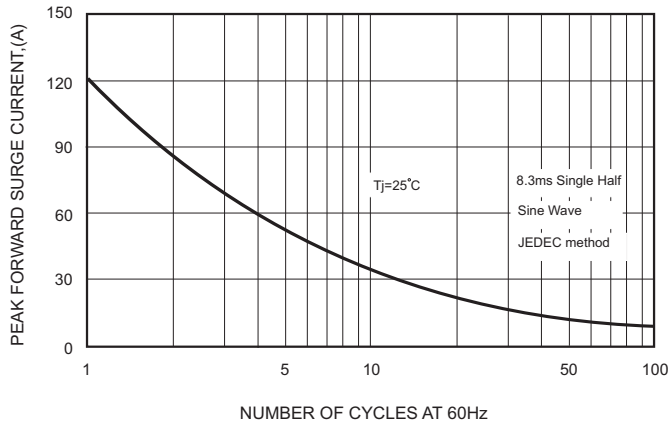


FIG.4 - TYPICAL REVERSE CHARACTERISTICS