

MBRF20150CTATF

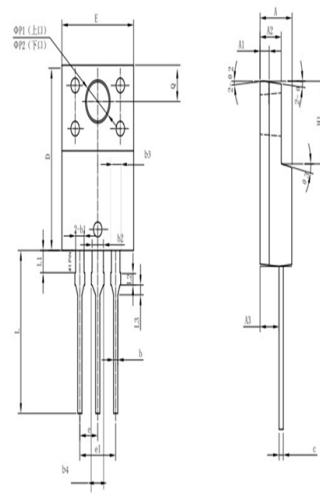
20 AMPERES SCHOTTKY BARRIER RECTIFIERS

FEATURES

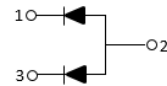
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-220F molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



A-T0220 (mm)			
DIM	MIN	MAX	典型值
A	4.30	4.70	4.50
A1	1.10	1.50	1.30
A2	2.80	3.20	3.00
A3	2.50	2.90	2.70
b	0.50	0.75	0.60
b1	1.10	1.35	1.20
b2	1.50	1.75	1.60
b3	1.20	1.45	1.30
b4	1.60	1.85	1.70
c	0.55	0.75	0.60
D	14.80	15.20	15.00
E	9.95	10.35	10.15
e	2.35	2.75	2.55
e1	4.90	5.30	5.10
H1	6.50	6.90	6.70
L	12.70	13.70	13.20
L1	1.60	2.00	1.80
L2	0.80	1.20	1.00
L3	0.60	1.00	0.80
ΦP1(上口)	3.30	3.70	3.50
ΦP2(下口)	2.99	3.39	3.19
Q	2.50	2.90	2.70



TO-220F

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	MBRF20150CTATF	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	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	0.92	V
Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	0.02 20	mA
Typical Thermal Resistance	$R_{\theta JC}$	2	$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^{\circ}C$



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RATING AND CHARACTERISTIC CURVES

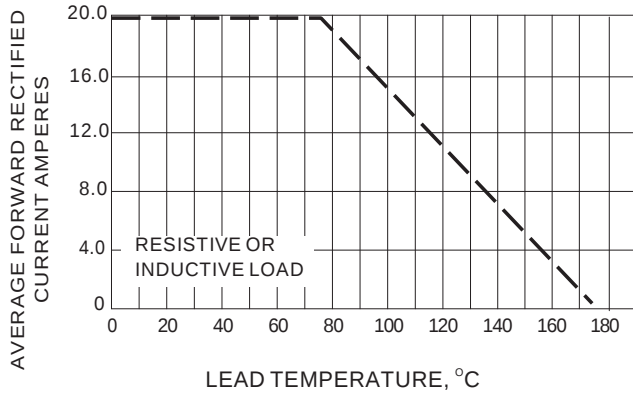


Fig.1- FORWARD CURRENT DERATING CURVE

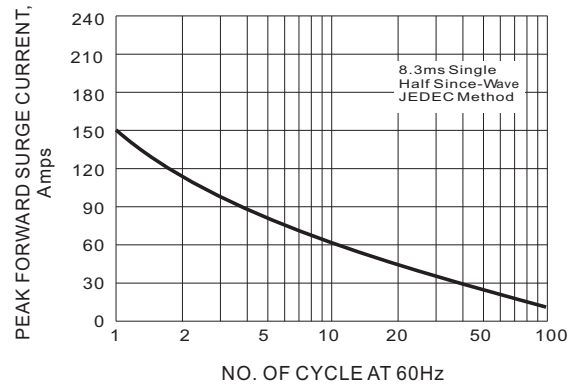


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

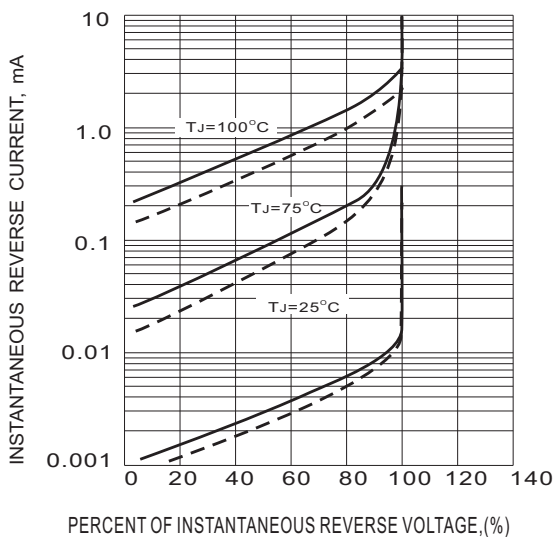


Fig.3- TYPICAL REVERSE CHARACTERISTICS

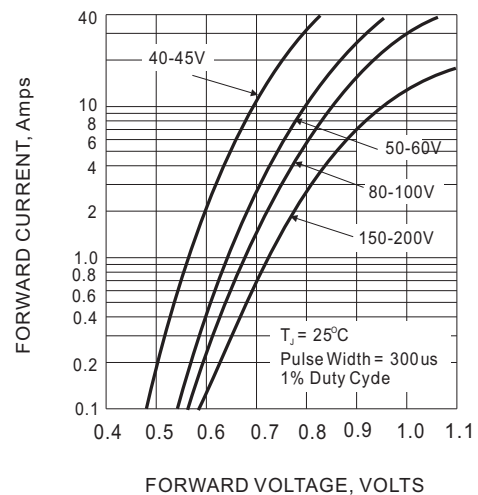


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS