

10A SCHOTTKY BARRIER RECTIFIERS

Dim.	Value Inch[mm]	
	Min.	Max.
A	0.139 [3.55]	---
B	0.387 [9.85]	0.419 [10.66]
C	0.226 [5.75]	0.269 [6.85]
D	0.548 [13.93]	0.624 [15.87]
E	0.50 [12.70]	---
F	---	0.177 [4.50]
G	0.195[4.95]	0.204[5.18]
H	0.019 [0.50]	0.038 [0.96]
J	0.163 [4.16]	0.196 [5.00]
K	0.045 [1.15]	0.054 [1.39]
L	---	0.025 [0.65]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXTREMELY LOW V_F
3. LOW STORED CHARGE
4. MAJORITY CARRIER CONDUCTION
5. LOW POWER LOSS/HIGH EFFICIENCY
6. CASE: TRANSFER MOLDED TO-220AC
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
9. WEIGHT: 2.1 GRAMS
10. RoHS COMPLIANT AND HALOGEN FREE

ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, SEE FIG.1	I_o	10 A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	150 A
TYPICAL THERMAL RESISTANCE	$R_{\theta JC}$	2.2 $^\circ\text{C/W}$
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO +175 $^\circ\text{C}$
MAXIMUM REVERSE CURRENT AT 25 $^\circ\text{C}$ PER LEG (NOTE 1)	I_R	0.05 (0.01mA FOR $\geq 100\text{V}$ DEVICE)
MAXIMUM REVERSE CURRENT AT 125 $^\circ\text{C}$ PER LEG (NOTE 1)	I_R	10 mA

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	OPERATING TEMPERATURE RANGE ($^\circ\text{C}$)	MAXIMUM FORWARD VOLTAGE V_F @ $I_F=10\text{A}$		MAXIMUM FORWARD VOLTAGE V_F @ $I_F=20\text{A}$,	
				@25 $^\circ\text{C}$	@125 $^\circ\text{C}$	@25 $^\circ\text{C}$	@125 $^\circ\text{C}$
MBR1040	40	28	- 55 TO +150	0.65V	0.57V	0.84V	0.72V
MBR1045	45	31.5	- 55 TO +150	0.65V	0.57V	0.84V	0.72V
MBR1060	60	42	- 55 TO +150	0.75V	0.70V	0.85V	0.75V
MBR10100	100	70	- 55 TO +150	0.85V	0.75V	0.95V	0.85V
MBR10150	150	105	- 55 TO +175	0.92V	0.80V	1.00V	0.90V
MBR10200	200	140	- 55 TO +175	0.92V	0.80V	1.00V	0.90V

NOTE : 1. PULSE TEST: 300 μs PULSE WIDTH, 1% DUTY CYCLE.

2. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD DERATING CURVE

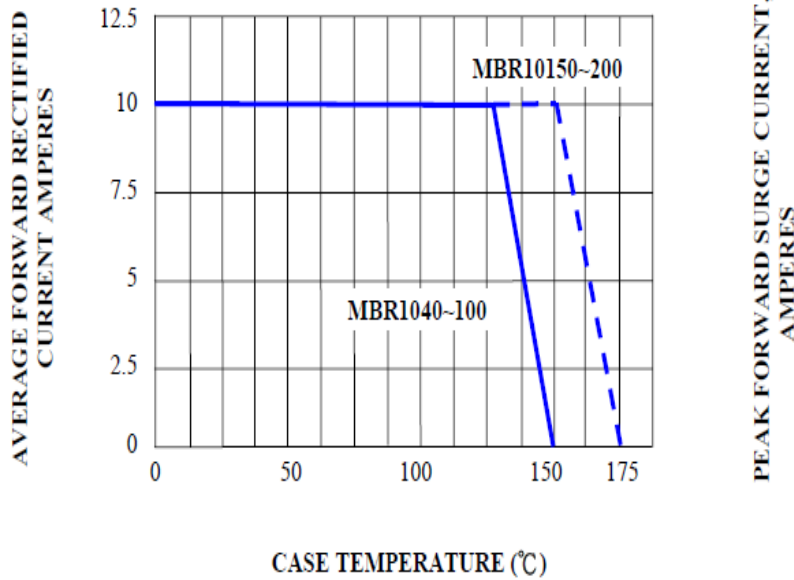


FIG. 2 - PEAK FORWARD SURGE CURRENT

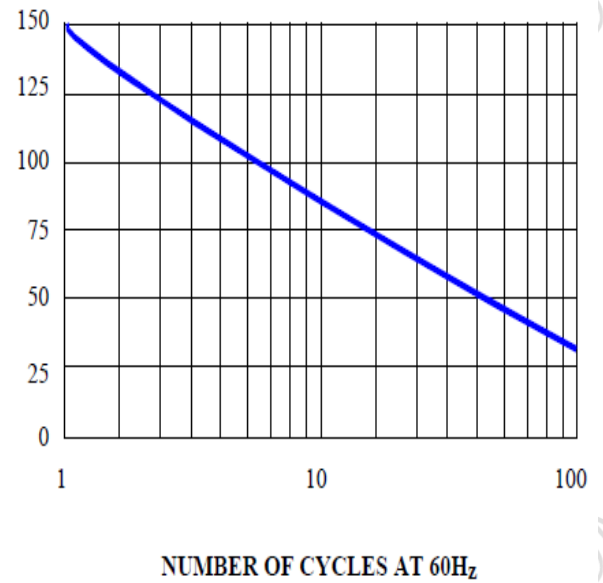


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

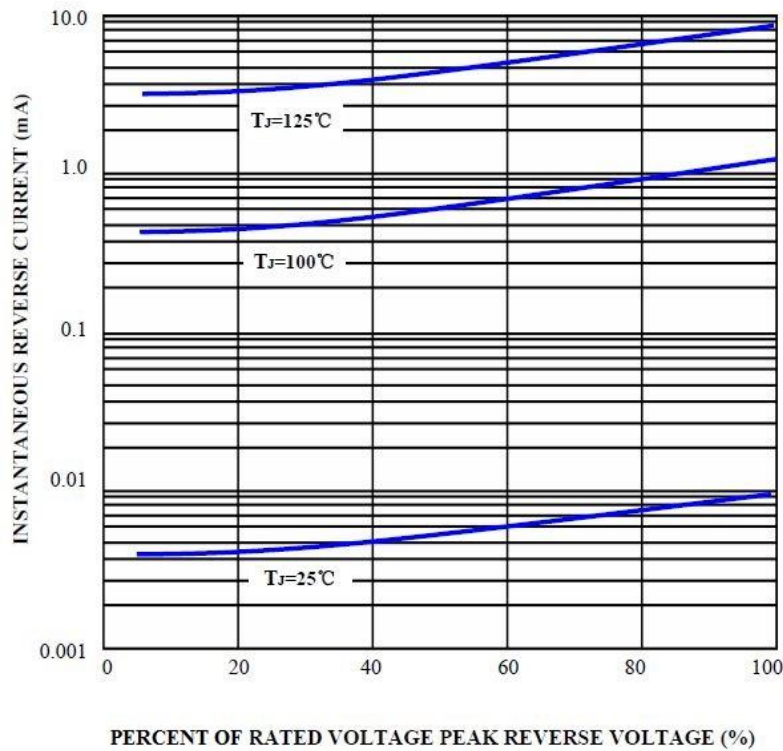


FIG. 4 - TYPICAL FORWARD CHARACTERISTIC PER LEG

