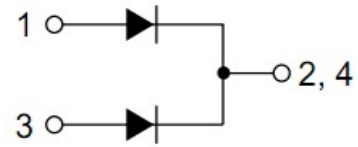
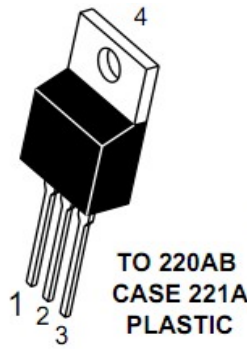


### Features

- Schottky Barrier Diodes
- 30 A Total (15A Per Diode Leg)
- Guard Ring for Stress Protection
- Low Forward Voltage
- 175°C Operating Junction Temperature
- Epoxy Meets UL 94 V 0 @ 0.125 in
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction
- Pb Free Packages are Available\*

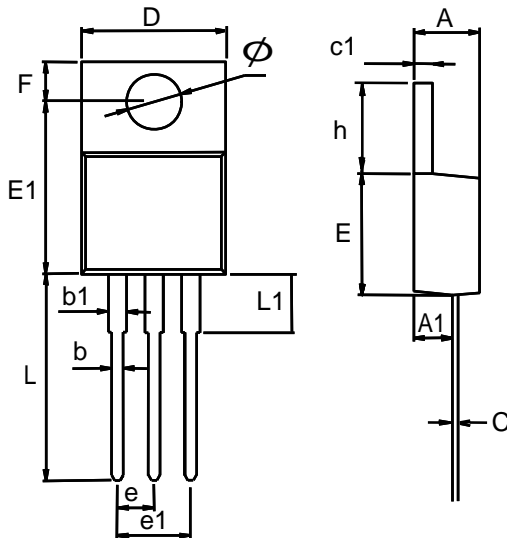


### Mechanical Characteristics:

- Case: Epoxy, Molded
- Weight: 2.26 grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

discharge 8KV, non-contact discharge 15KV

### TO-220AB PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	4.470	4.670
A1	2.520	2.820
b	0.710	0.910
b1	1.170	1.370
c	0.310	0.530
c1	1.170	1.370
D	10.010	10.310
E	8.500	8.900
E1	12.28	12.68
e	2.540 TYP.	
e1	4.980	5.180
F	2.590	2.890
h	6.00	6.40
L	13.40	13.80
L1	3.560	3.960
Φ	3.735	3.935

### RATINGS (Per Diode Leg)

Rating	Symbol	MBR3080CT	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	80	V
Average Rectified Forward Current (Rated $V_R$ ) $T_C = 133^\circ\text{C}$	$I_{F(AV)}$	15	A
Peak Repetitive Forward Current (Rated $V_R$ , Square Wave, 20 kHz) $T_C = 133^\circ\text{C}$	$I_{FRM}$	30	A
Maximum Instantaneous Forward Voltage ( $I_F = 15\text{Amps}$ , $T_C = 25^\circ\text{C}$ )	$V_F$	0.8	V
Nonrepetitive Peak Surge Current (Surge applied at rates load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	300	A
Peak Repetitive Reverse Surge Current (2.0 $\mu\text{s}$ , 1.0 kHz)	$I_{RRM}$	5	A
Operating Junction Temperature	$T_J$	- 65 to +175	$^\circ\text{C}$
Voltage Rate of Change (Rated $V_R$ )	$dv/dt$	10,000	$\text{V}/\mu\text{s}$
Maximum Instantaneous Reverse Current (Rated dc Voltage, $T_C = 125^\circ\text{C}$ )	$I_R$	6.0	mA
(Rated dc Voltage, $T_C = 25^\circ\text{C}$ )		0.05	

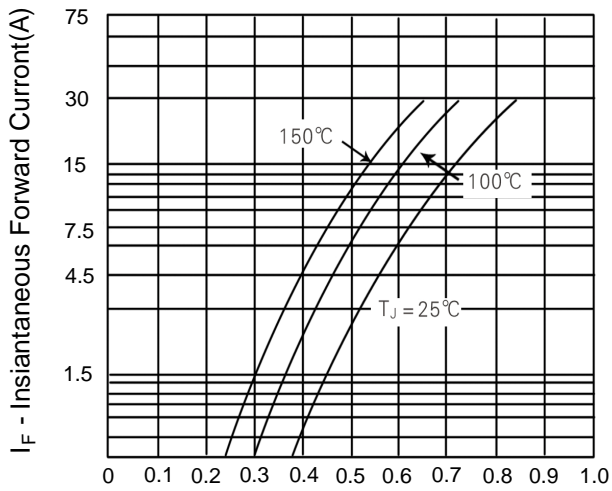


Figure 1. Typical Forward Voltage Per Diode

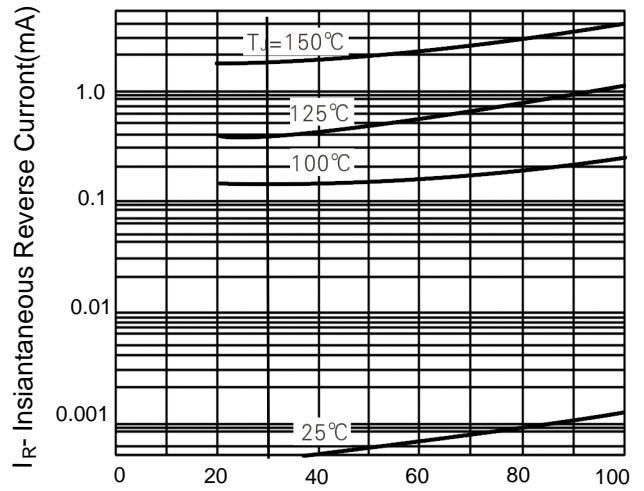


Figure 2. Typical Reverse Current Per Diode

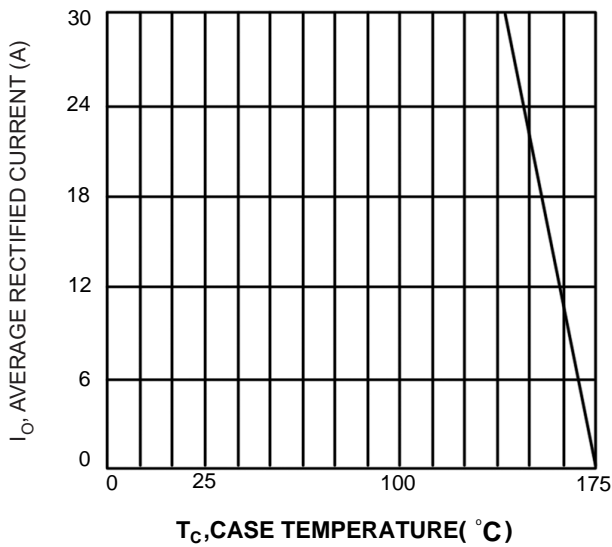


Fig.3 Forward Current Derating Curve

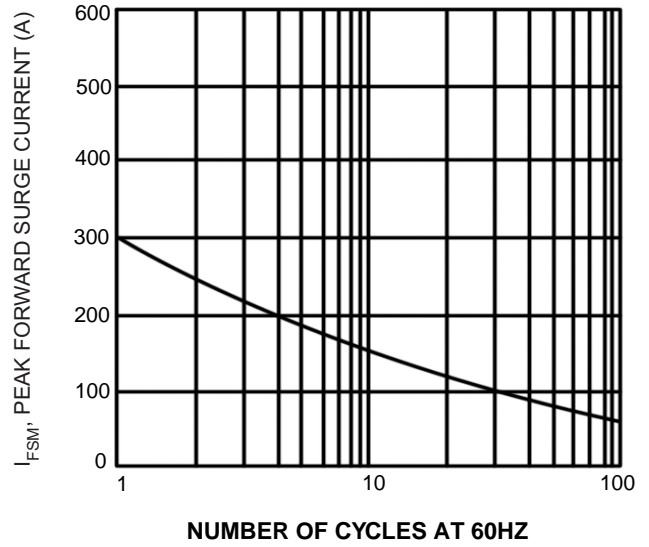


Fig.4 Max Non-Repetitive Surge Current