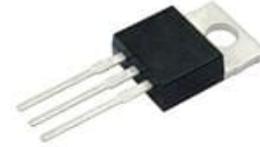


Features

- Low reverse leakage
- High forward surge capability
- High reliability
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking



TO-220AB

Mechanical Data

- Case: TO-220AB Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free
- Mounting Position: Any
- Mounting torque: Recommend 0.3 N*m

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless other wise specified.

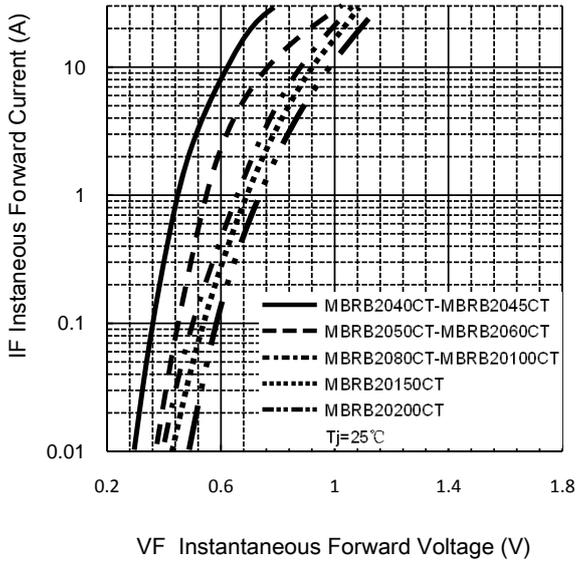
Parameter	Symbols	MBR 2040CT	MBR 2045CT	MBR 2050CT	MBR 2060CT	MBR 2080CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	20.0								A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	150								A
@ $I_F=10.0A$ Maximum forward voltage	V_F	0.55	0.70	0.85	0.95	0.99				V
@ V_{DC} Maximum reverse current	I_R	100				50				uA
$T_A=25^{\circ}C$		20				10				mA
$T_A=100^{\circ}C$										
Typical thermal resistance (Note 1)	$R_{\theta JC}$	4								°C/W
$V_R=4.0V, f=1MHz$ Type junction capacitance	C_j	310								pF
Operating junction and storage temperature rang	T_j, T_{STG}	-55 --- +150								°C

Note:

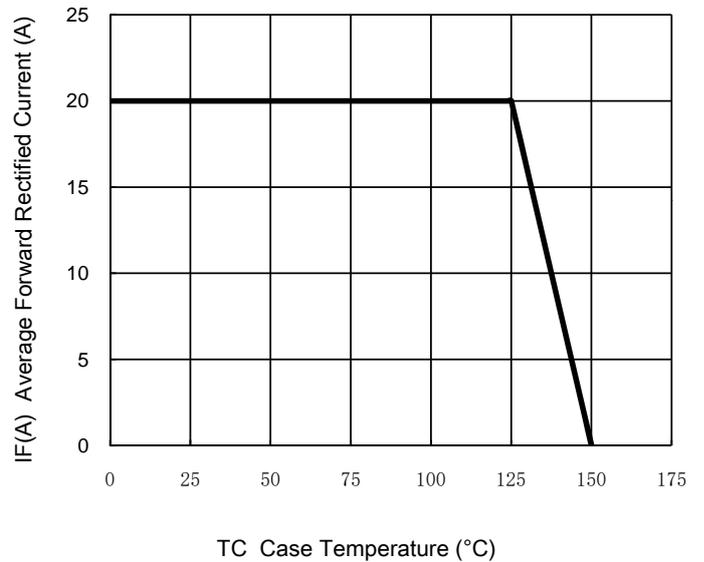
- 1) Thermal resistance from junction to case , PCB mounted.

Characteristic Curves

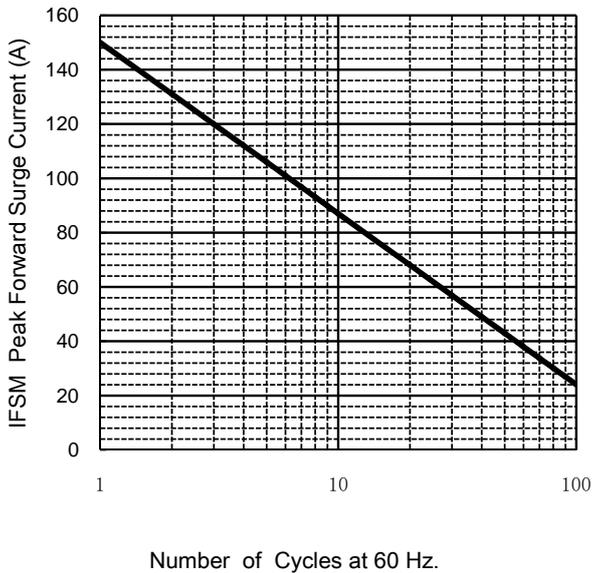
TYPICAL FORWARD CHARACTERISTIC



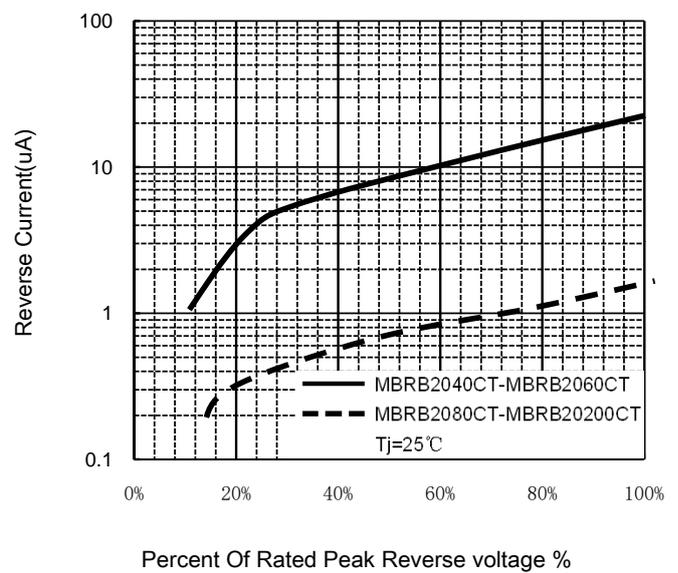
FORWARD CURRENT DERATING CURVE



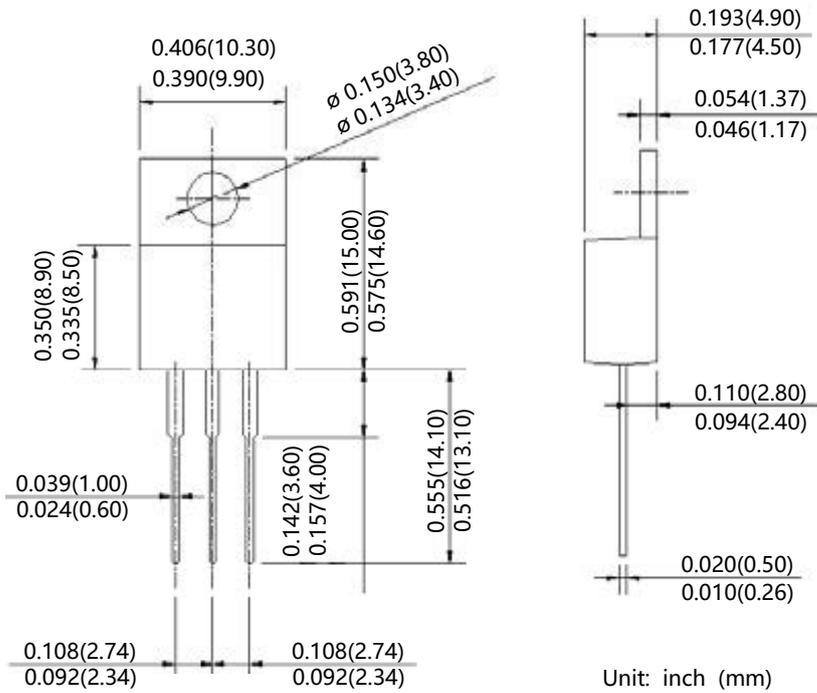
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



Typical Reverse Characteristics



Package Outline



Package Information

Qty: 1,000/Tape and reel