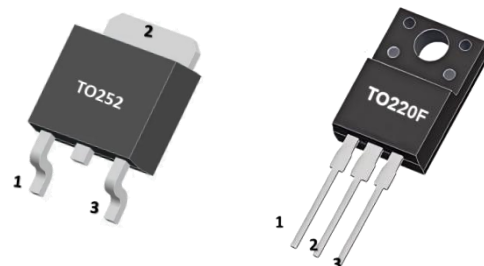


DESCRIPTION

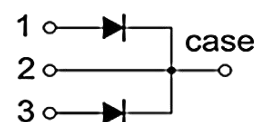
The MBR2060DT meet the ROHS and Green Product requirement with full function reliability approved.

FEATURE

- *High Surge Capacity
- *For Use In Low Voltage,High Frequency Inverters, Free Wheeling and Polarity Protection Applications.
- *Metal Silicon Junction,Majority Carrier Conduction.
- *High Current Capacity,Low Forward Voltage Drop.
- *Guard Ring for Over Voltage Protection.



1. ANODE
2. CATHODE
3. ANODE



ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		60	V
VRWM	Working peak reverse voltage		60	V
VR	DC blocking voltage		60	V
VR(RMS)	RMS reverse voltage		42	V
IO	Average rectified output current		20 (10*2)	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)		150*2	A
Tj	Junction temperature		150	°C
Tstg	Storage temperature		-55 ~ +150	°C
RθJA	Thermal Resistance from Junction to Ambient	TO-252	100	°C/W
		TO-220F	58	
RθJC	Thermal Resistance From Junction To Case	TO-252	5	°C/W
		TO-220F	3	

Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1mA$	60			V
Reverse current	I_R	$V_R=60V$	$T_J = 25^\circ C$	5	50	μA
			$T_J = 125^\circ C$	5.0		mA
Forward voltage	V_F	$I_F=5A$	$T_J = 25^\circ C$	0.60		V
			$T_J = 125^\circ C$	0.54		V
		$I_F=10A$	$T_J = 25^\circ C$	0.72	0.75	V
			$T_J = 125^\circ C$	0.62		V

*Pulse test: pulse width $\leq 300\mu s$, duty cycles $\leq 2.0\%$

■ TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

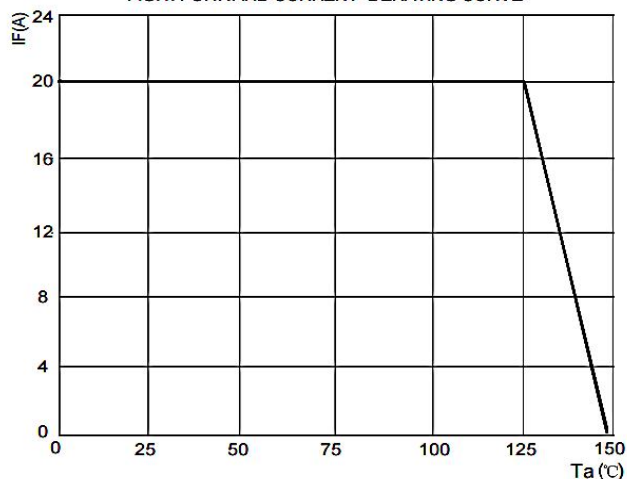


FIG.2: TYPICAL FORWARD CHARACTERISTICS

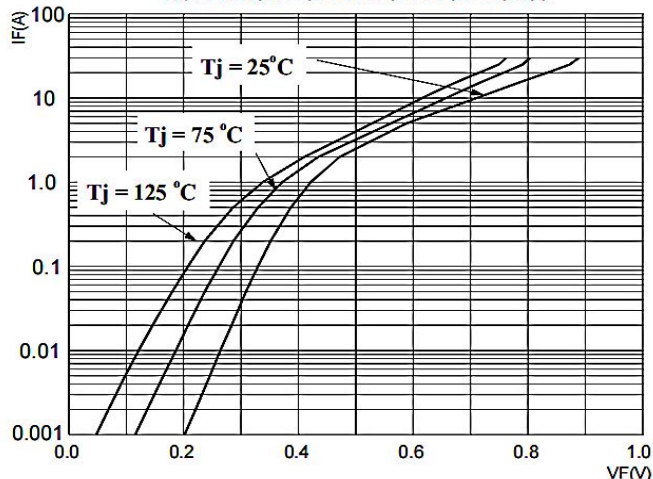


FIG.3: TOTAL CAPACITANCE DERATING CURVE

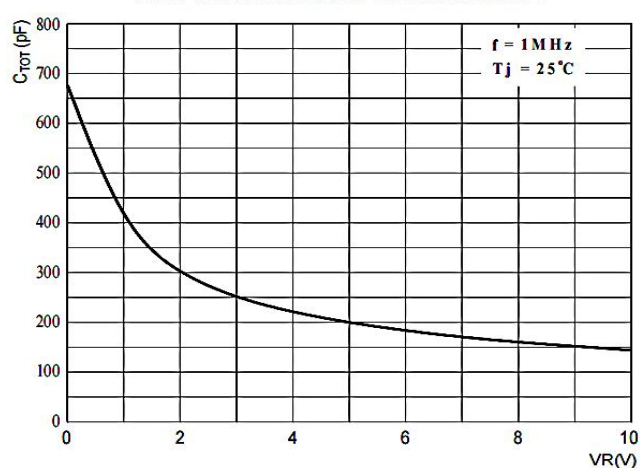
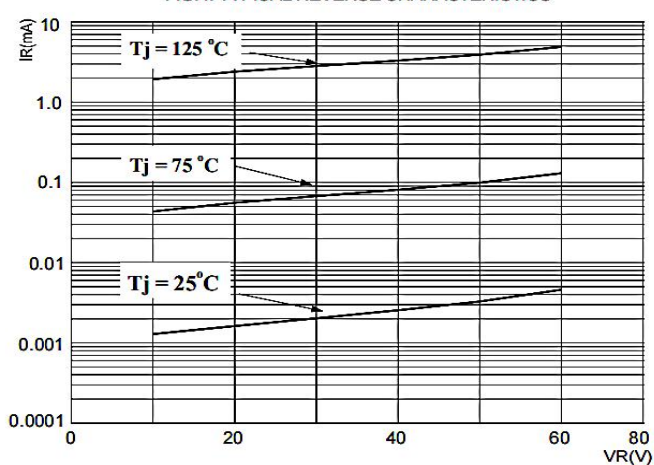
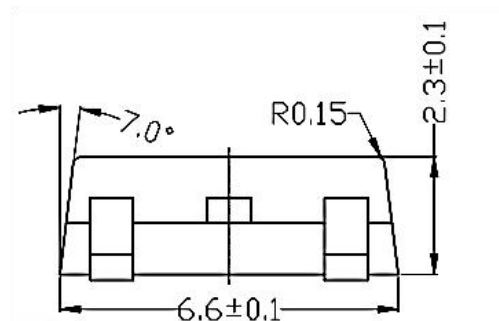
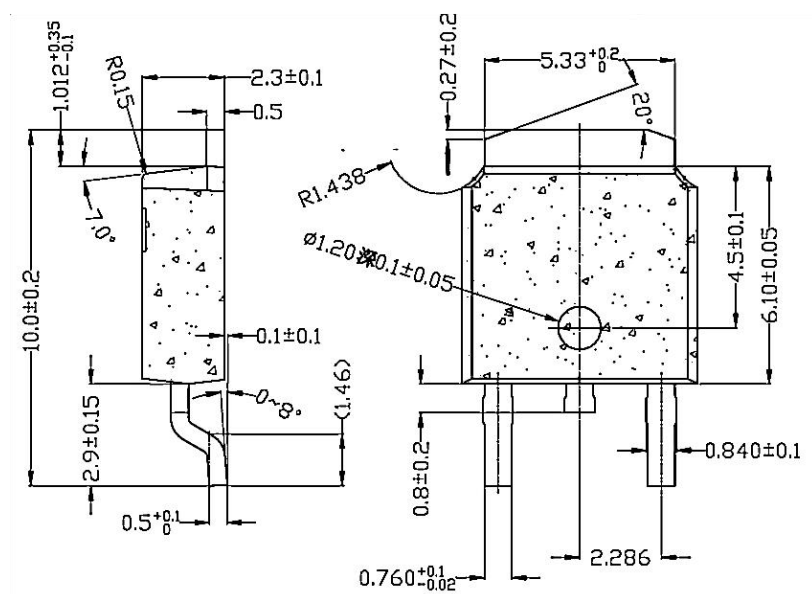


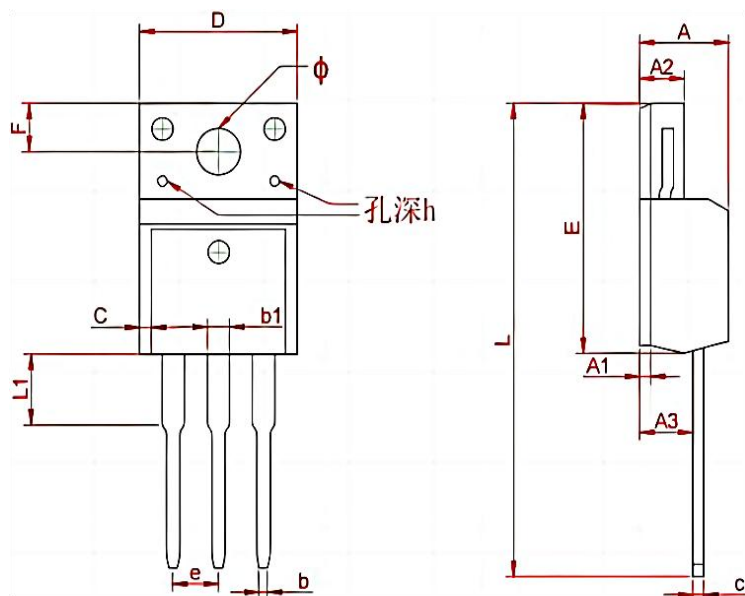
FIG.4: TYPICAL REVERSE CHARACTERISTICS



■ TO - 252 Package Outline Dimensions



■ TO - 220F Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max	Min	Max
A	4.300	4.750	0.169	0.185
A1	1.830 REF		0.072 REF	
A2	2.300	2.850	0.090	0.112
A3	2.500	2.900	0.098	0.114
b	0.400	0.420	0.016	0.016
b1	1.220	1.280	0.048	0.050
C	0.690	0.720	0.027	0.028
c	0.490	0.510	0.019	0.020
D	9.960	10.200	0.392	0.400
E	15.000	15.950	0.588	0.625
e	2.574 TYP		0.101TYP	
F	3.470 REF		0.136 REF	
y	3.200 REF		0.125 REF	
h	0.000	0.300	0.000	0.012
L	28.780	28.900	1.128	1.133
L1	2.990	3.100	0.117	0.122