



MBR3060CT

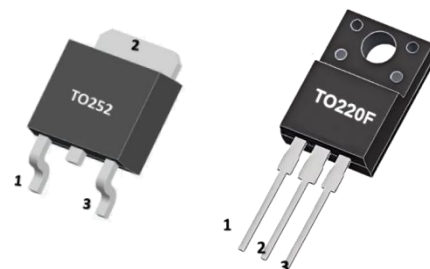
SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

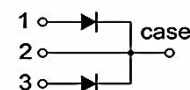
The MBR3060CT meet the ROHS and Green Product requirement with full function reliability approved.

FEATURE

- *Schottky Barrier Chip
- *Guard Ring Die Construction for Transient Protection
- *Low Power Loss,High Efficiency
- *High Surge Capability
- *High Current Capability and Low Forward Voltage Drop
- *For Use in Low Voltage, High Frequency Inverters,Free Wheeling, and Polarity Protection Applications



1. ANODE
2. CATHODE
3. ANODE



MARKING



HY : HY LOGO

MBR3060CT=Device Code

XXXX=Date Code

Solid Dot=Green molding compound

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

Symbol	Parameter		VALUE	Unit
V_{RRM}	Peak repetitive reverse voltage		60	V
V_{RWM}	Working peak reverse voltage			
V_R	DC blocking voltage			
V_{R(RMS)}	RMS reverse voltage		42	V
I_o	Average rectified output current		30（15*2）	A
I_{FSM}	Non-Repetitive peak forward surge current (8.3ms half sine wave)		200*2	A
R_{θJc}	Thermal resistance from junction to case ,Tc=25℃	TO-252	2	℃/W
		TO-220F	3.0	
R_{θJA}	Thermal resistance from junction to ambient	TO-252	110	℃/W
		TO-220F	62.5	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~+150	℃

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.



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■ 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	$V_R=60V$	$T_J=25^{\circ}C$	5.0	100	μA
			$T_J=125^{\circ}C$	5.0		mA
Forward voltage	V_F	$I_F=10A$	$T_J=25^{\circ}C$	0.65	0.68	V
			$T_J=125^{\circ}C$	0.58		V
		$I_F=15A$	$T_J=25^{\circ}C$	0.75	0.80	V
			$T_J=125^{\circ}C$	0.65		V

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

■ TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

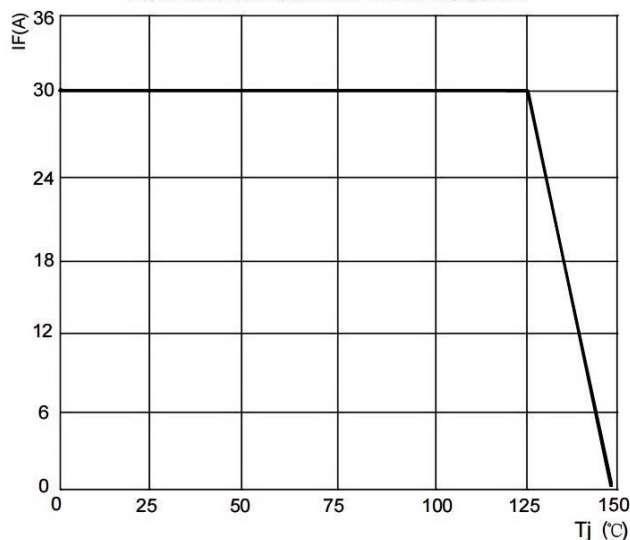


FIG.2: TYPICAL FORWARD CHARACTERISTICS

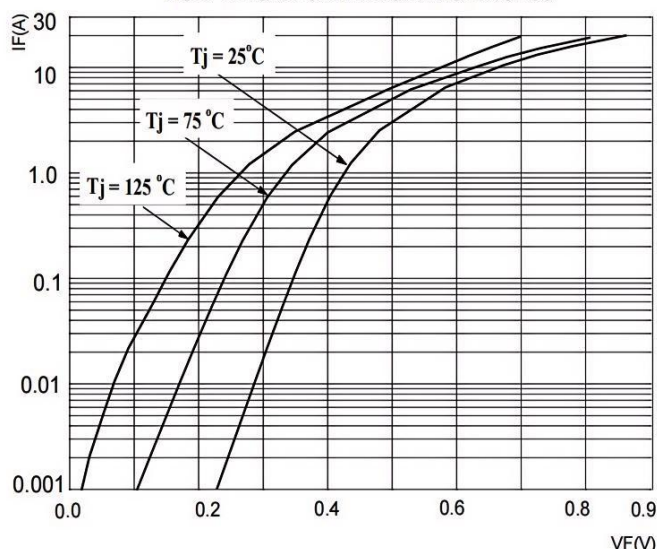


FIG.3: TOTAL CAPACITANCE DERATING CURVE

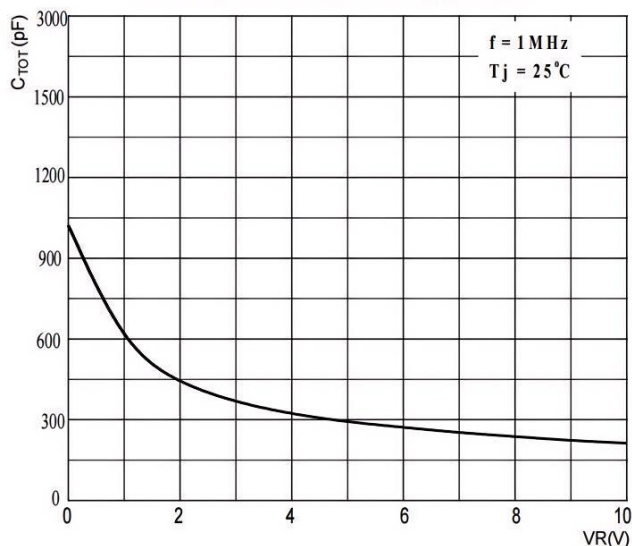
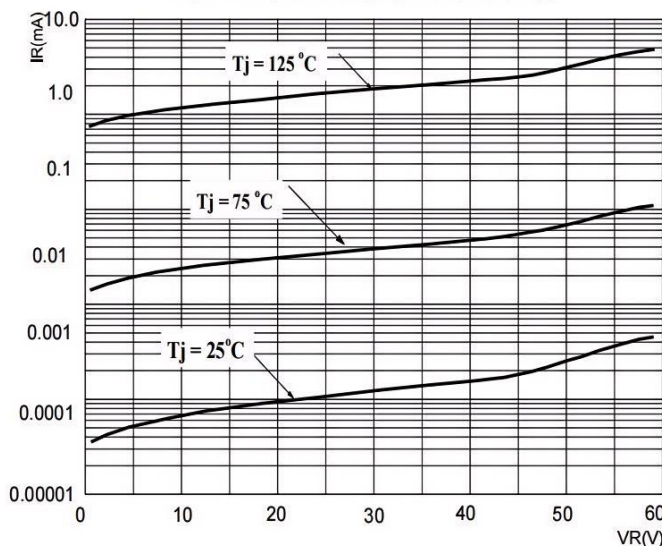


FIG.4: TYPICAL REVERSE CHARACTERISTICS

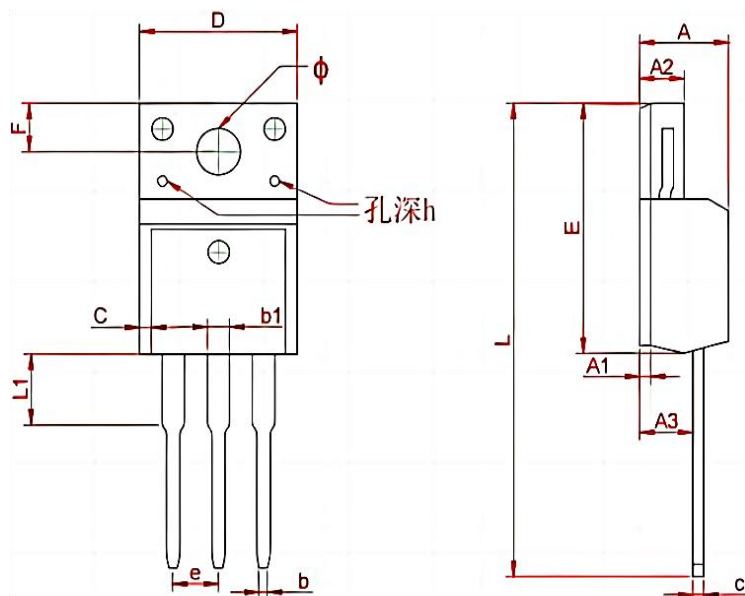




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TO - 220F Package Outline Dimensions



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

TO - 220F Packing Information



50PCS



20 Tube



Outer Box

5 Inner
Box



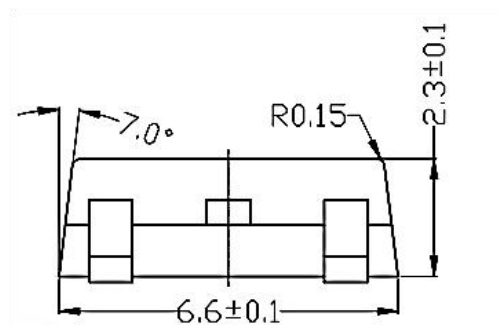
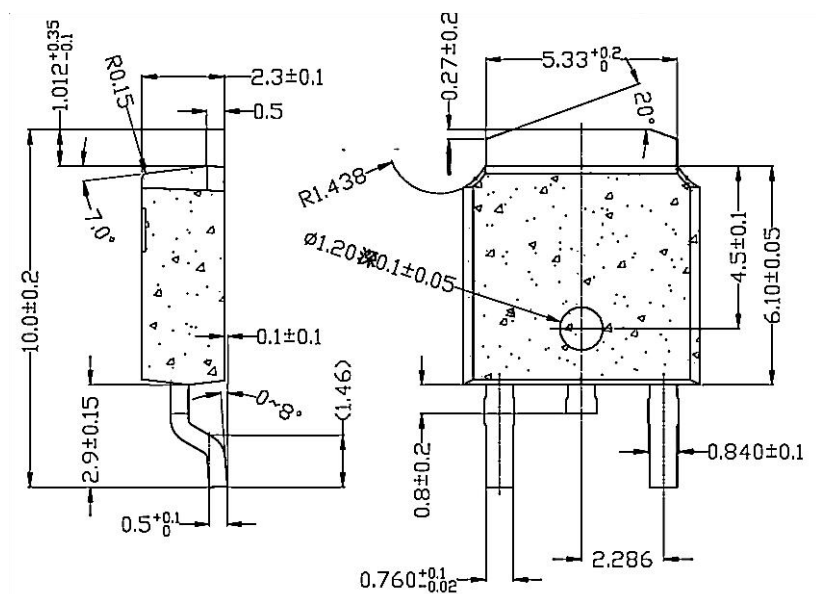
Inner Box

Package version	Tube dimensions LxWxH (mm)	Per Tube (pcs)	Tube per box	Inner box dimensions LxWxH (mm)	PCS/ Inner box	Outer box dimensions LxWxH(mm)	PCS/ Outer box
TO-220F	530*32*7	50	20	580*155*50	1000	602*277*188	5000

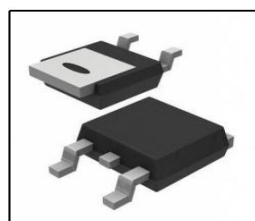
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■ TO - 252 Package Outline Dimensions



■ TO - 252 Packing Information



2500PC
S/reel



2 Reel/BOX



Outer box



Inner box

Package version	Reel dimensions $\Phi \times H$ (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions $L \times W \times H$ (mm)	Outer box (pcs)	Outer box dimensions $L \times W \times H$ (mm)
T0-252	$\Phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280