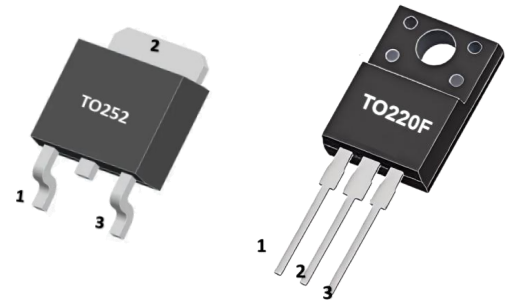


DESCRIPTION

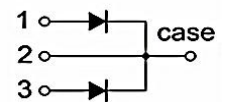
The MBR10100CS/CT meet the ROHS and Green Product requirement with full function reliability approved.

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



WPM : LOGO

MBR10100CS=Device Code (TO-252)

MBR10100CT=Device Code (TO-220F)

ABSOLUTE MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$, unless otherwise specified.)

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		100	V
VRWM	Working peak reverse voltage		100	V
VR	DC blocking voltage		100	V
VR(RMS)	RMS reverse voltage		70	V
IO	Average rectified output current		10 (5*2)	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)		100*2	A
Tj	Junction temperature		175	$^{\circ}\text{C}$
Tstg	Storage temperature		-55 ~ +150	$^{\circ}\text{C}$
RθJA	Thermal Resistance from Junction to Ambient	TO-252	110	$^{\circ}\text{C/W}$
		TO-220F	60	
RθJC	Thermal Resistance From Junction To Case	TO-252	6	$^{\circ}\text{C/W}$
		TO-220F	4	

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	$V_{(BR)}$	$I_R=0.1mA$		100			V
Reverse current	I_R	$V_R=100V$			1	5	μA
Forward voltage	V_{F1}	$I_F=3A$	$T_j=25^\circ C$		0.70		V
	V_{F2}	$I_F=5A$	$T_j=25^\circ C$		0.77	0.82	V
	V_{F3}	$I_F=10A$	$T_j=25^\circ C$			0.95	V

Notes: 1. Short duration pulse test used to minimize self-heating effect.
2. Thermal resistance junction to case mounted on heatsink.

TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

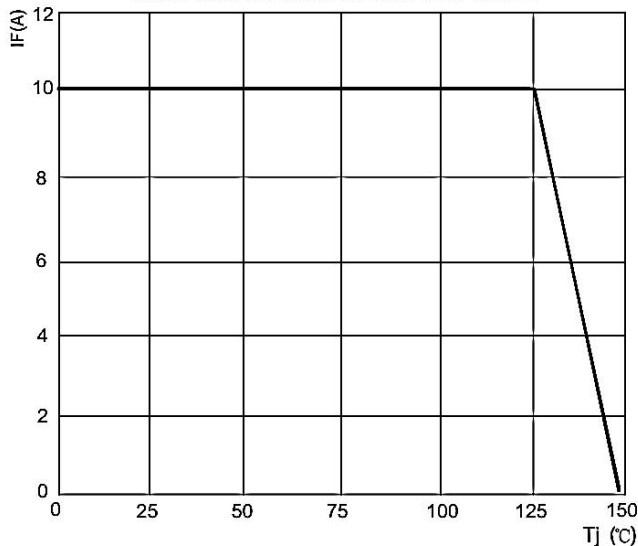


FIG.2: TYPICAL FORWARD CHARACTERISTICS

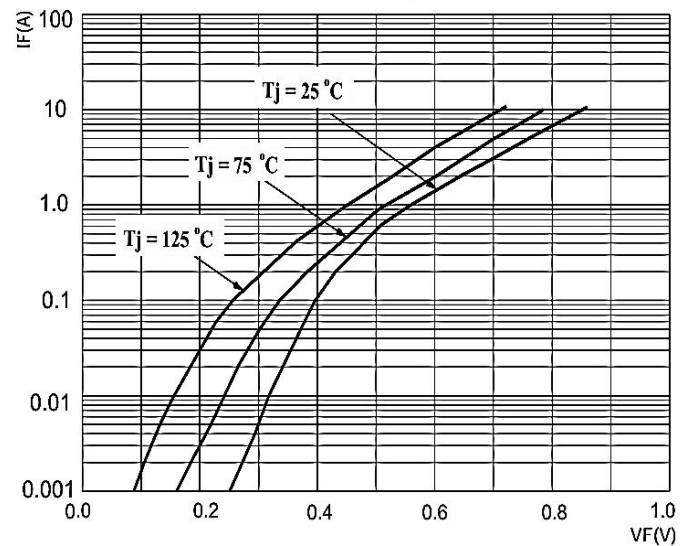


FIG.3: TOTAL CAPACITANCE DERATING CURVE

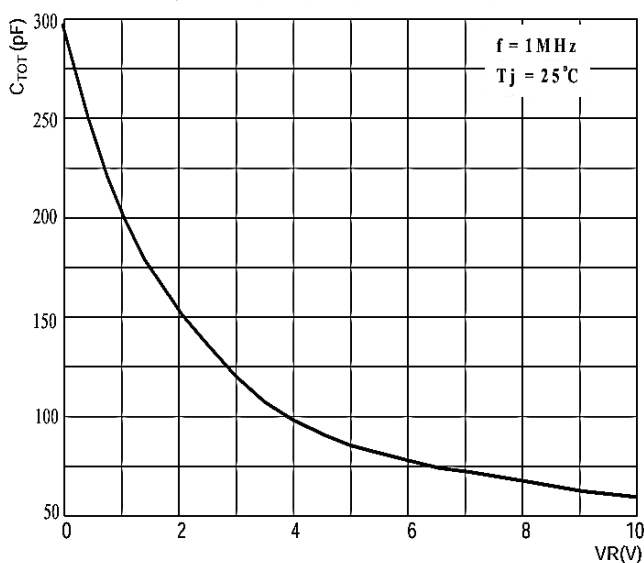
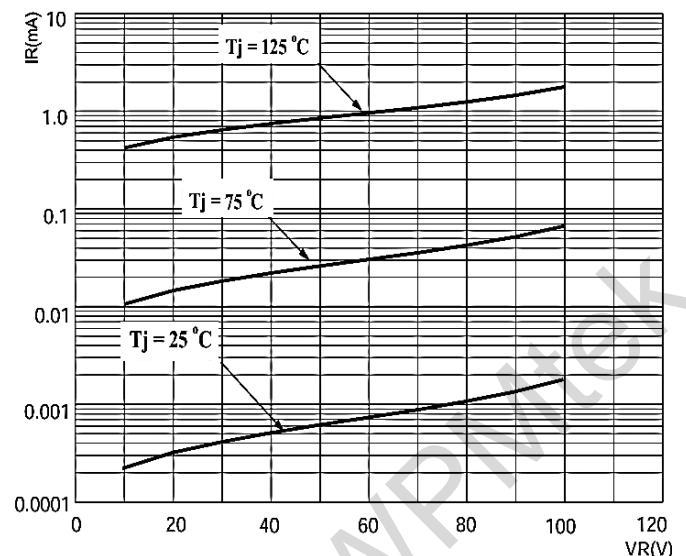
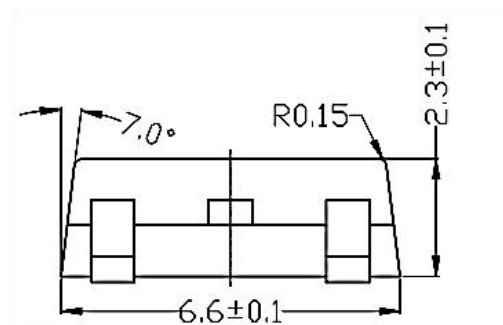
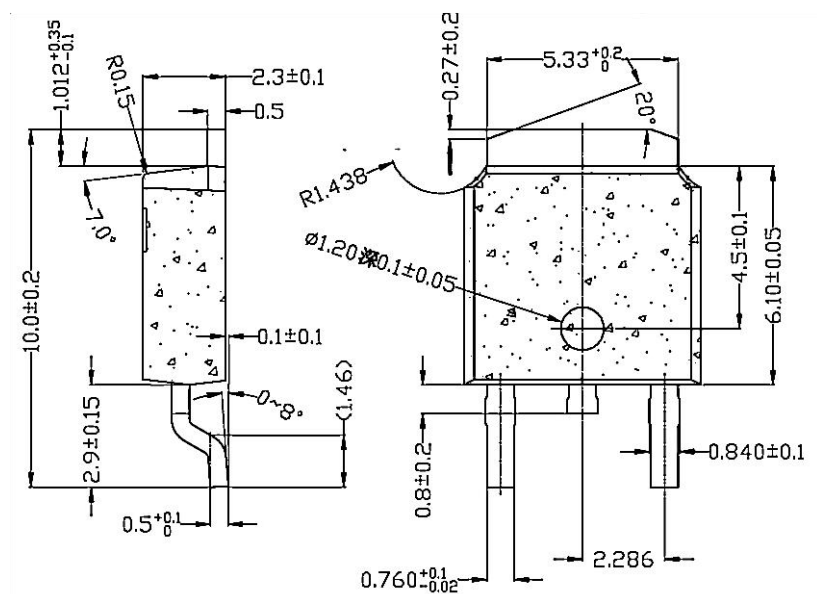


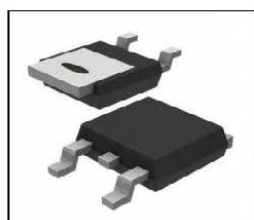
FIG.4: TYPICAL REVERSE CHARACTERISTICS



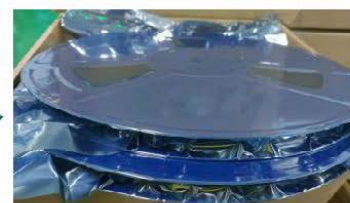
TO - 252 Package Outline Dimensions



TO - 252 Packing Information



2500PC
S/reel



2 Reel/BOX



5 Inner
Box

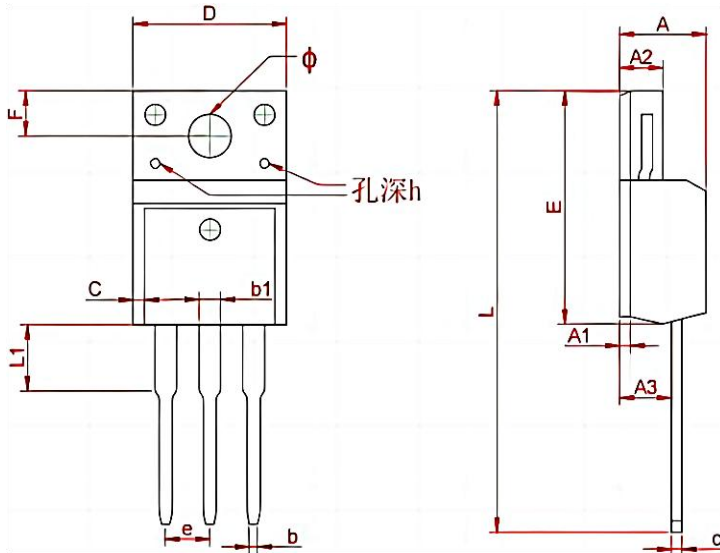
Outer box



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

TO - 220F Package Outline Dimensions

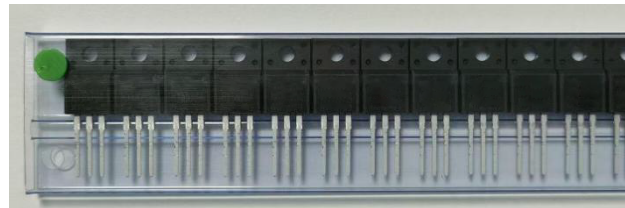


Symbol	Dimensions In Millimeters	
	Min	Max
A	4.300	4.750
A1	0.7 REF	
A2	2.300	2.850
A3	2.500	2.900
b	0.380	0.420
b1	1.220	1.280
C	1.08	1.200
c	0.480	0.520
D	10.15	10.450
E	15.700	15.950
e	2.574 TYP	
F	3.470 REF	
y	3.200 REF	
h	0.000	0.800
L	28.780	28.900
L1	2.990	3.100

TO - 220F Packing Information



50PCS



20 Tube



5 Inner
Box



Outer 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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