

MBR(D/F)10150CT

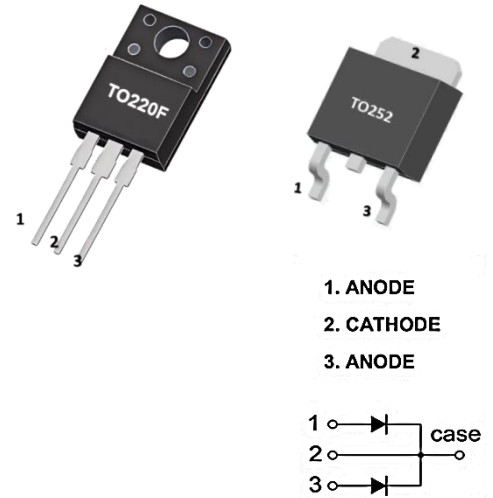
SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The MBR(D/F)10150CT 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



MARKING(The image is for reference only. Please take the actual product as the standard)



MBR(D/F)10150CT=Device Code

XXXX(X)=Date Code

Solid Dot=Green molding compound

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

SYMBOL	PARAMETER	VALUE	UNIT	
VRRM	Peak repetitive reverse voltage	150	V	
VRWM	Working peak reverse voltage	150	V	
VR	DC blocking voltage	150	V	
VR(RMS)	RMS reverse voltage	105	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	°C	
Tstg	Storage temperature	-55~+150	°C	
RθJA	Thermal Resistance from Junction to Ambient	TO-252	100	°C/W
		TO-220F	60	
RθJC	Thermal Resistance From Junction To Case	TO-252	6	°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.



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

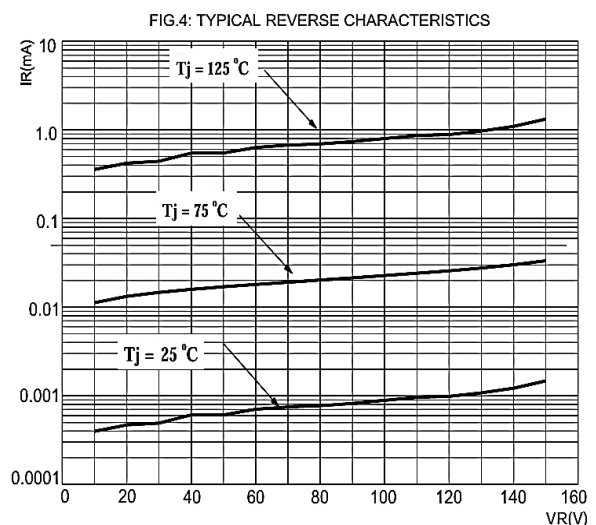
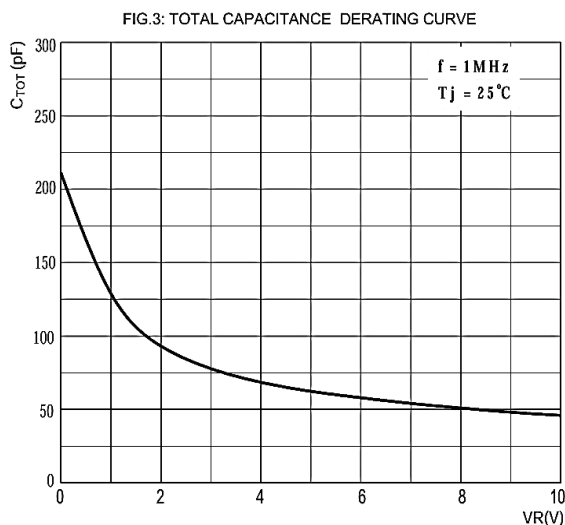
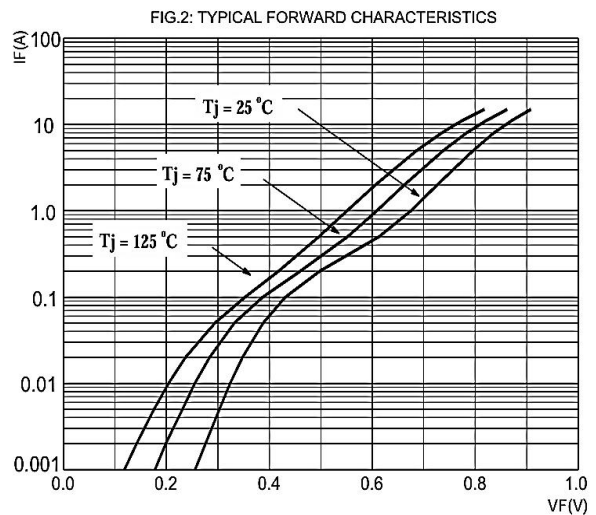
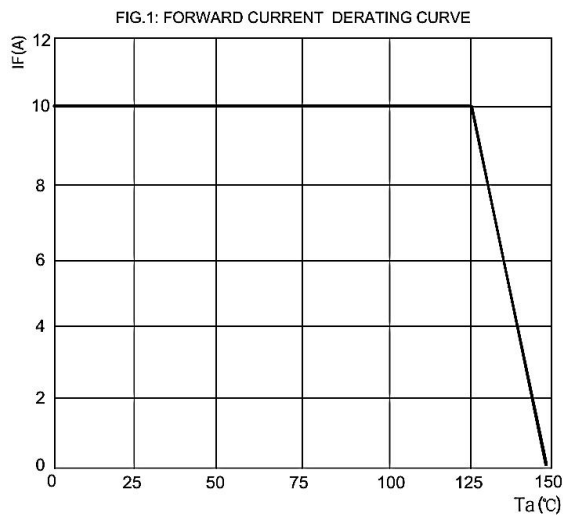
PARAMETER	SYMBOL	TEST CONDITIONS		MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	IR=0.2mA		150			V
Reverse current	IR	VR=150V				100	μA
Forward voltage	VF1	IF=3A	Tj=25°C		0.75		V
	VF2	IF=5A	Tj=25°C			1	V
	VF3	IF=10A	Tj=25°C			1	V
Typical total capacitance	Ctot	VR=5V,f=1MHz			500		pF

*Notes:1. Short duration on pulse test used to minimize self-heating effect.

2. Thermal resistance junction to case mounted on heatsink.

3. Pulse test pulse width ≤300μs, duty cycle≤2.0%.

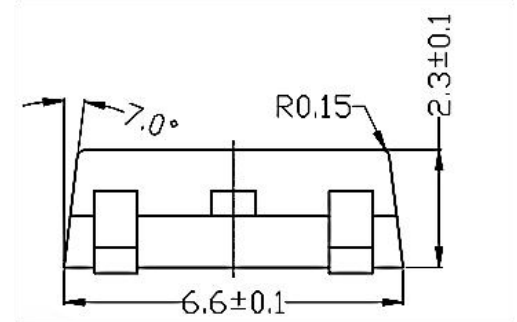
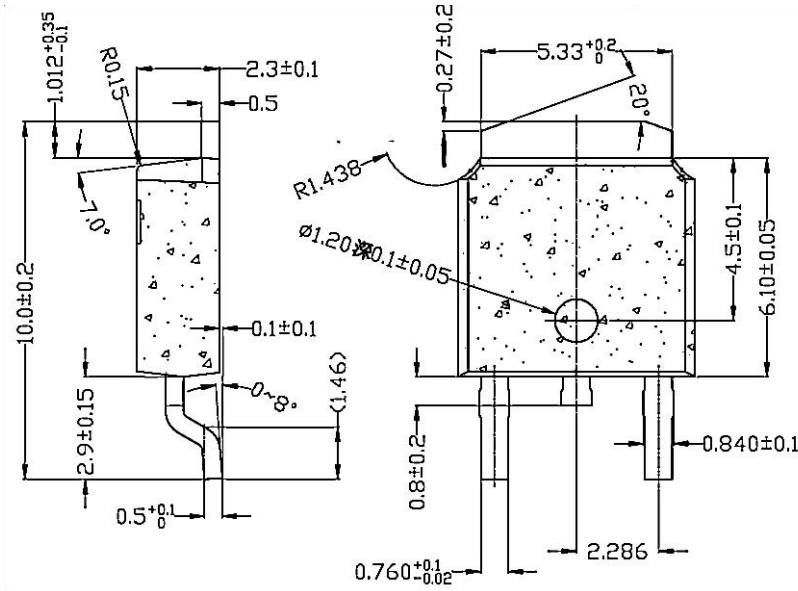
TYPICAL CHARACTERISTICS



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TO - 252 Package Outline Dimensions



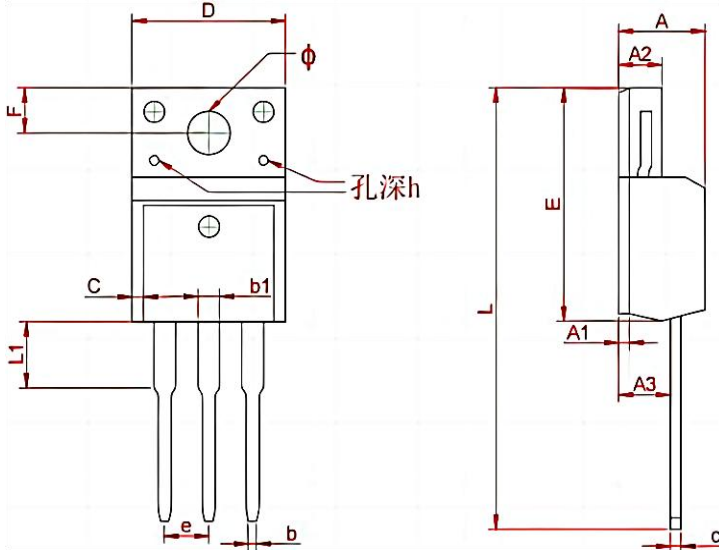
TO - 252 Packing Information

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)
TO-252	$\Phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280

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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

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