

MBR(D/F)20100CT

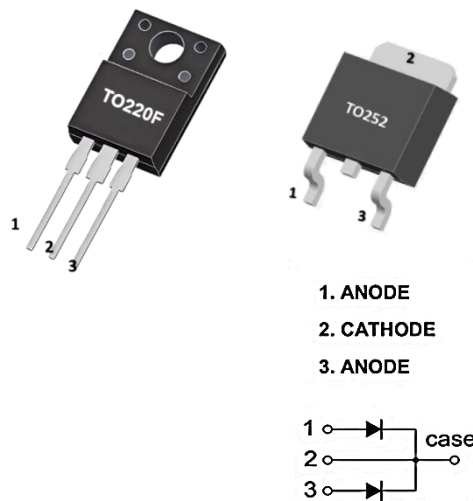
SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The MBR(D/F)20100CT 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)20100CT=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		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		20 (10*2)	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)		150*2	A
Tj	Junction temperature		175	°C
Tstg	Storage temperature		-55 ~ +150	°C
Cj (Ctot)	Typical total capacitance(VR=5V,f=1MHz)		500	pF
RθJA	Thermal Resistance fromJunction 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.

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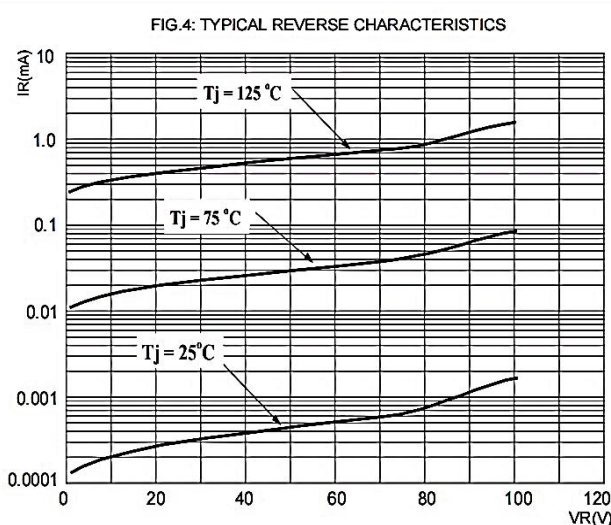
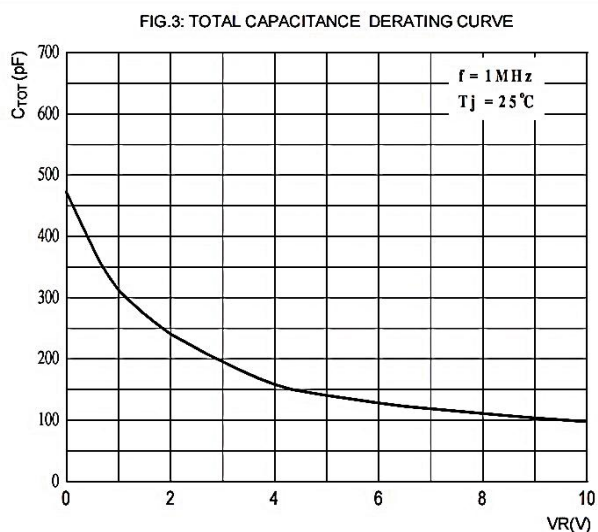
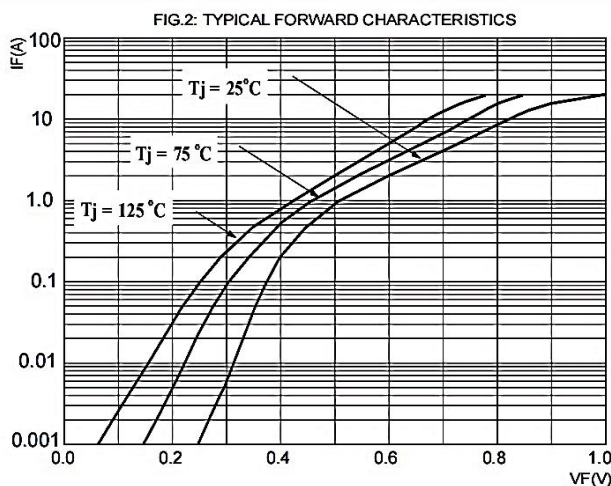
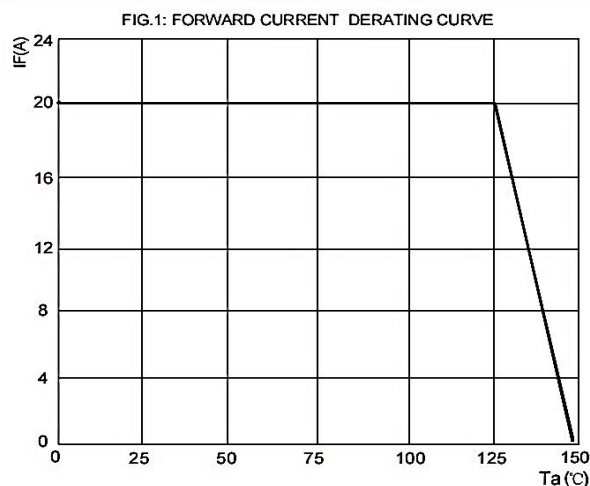
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■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

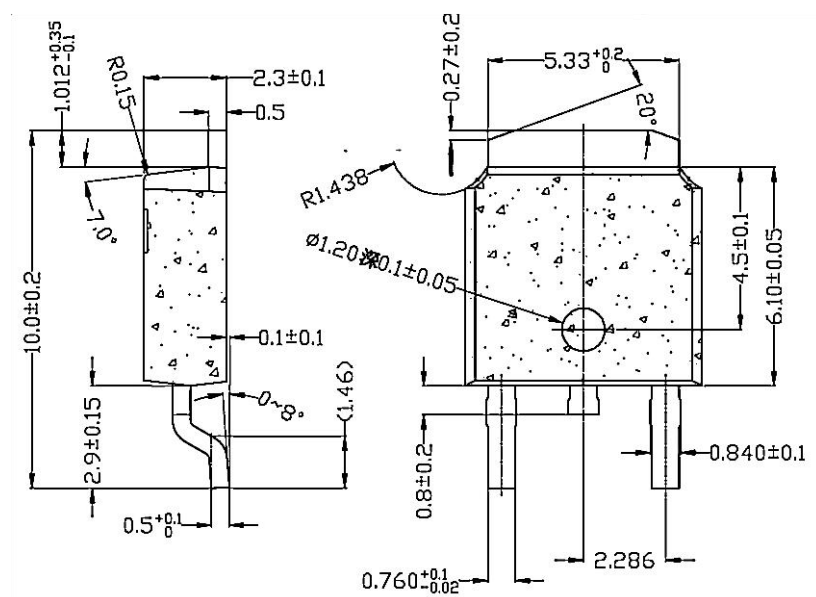
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	I R=0.2mA	100			V
Reverse current	I R	VR=100V			5	uA
Forward voltage	VF	I F=5A	Tj =25°C			
			Tj =125°C	5.0		mA
		I F=10A	Tj =25°C		0.8	V
			Tj =125°C	0.60		V
			Tj =25°C		0.95	V
			Tj =125°C	0.68		V

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%

■ TYPICAL CHARACTERISTICS



■ TO - 252 Package Outline Dimensions

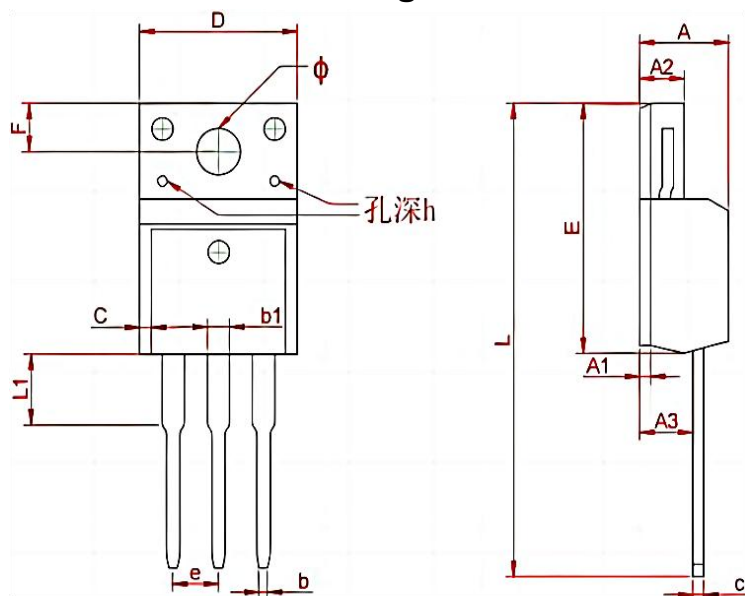


Package version	Reel dimensions $\Phi \times H$ (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions $L \times W \times H$ (mm)	Outer box (pcs)	Outer box dimensions $L \times W \times H$ (mm)
T0-252	$\Phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280

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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 LxW×H (mm)	Per Tube (pcs)	Tube per box	Inner box dimensions LxW×H (mm)	PCS/ Inner box	Outer box dimensions L×W×H(mm)	PCS/ Outer box
TO-220F	530*32*7	50	20	580*155*50	1000	602*277*188	5000