

### **DESCRIPTION**

The MBR60100CT meet the ROHS and Green Product requirement with full function reliability approved.

#### **FEATURE**

- \*Low power loss, high efficiency.
- \*High surge capacity.
- \*High frequency operation.
- \*For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- \*Metal silicon junction, majority carrier conduction.
- \*High current Capability, low forward voltage drop.
- \*Guard ring for over voltage protection.





### **MARKING**



WPM: LOGO

MBR60100CT=Device Code

## **ABSOLUTE MAXIMUM RATINGS**(T<sub>A</sub>=25°C, unless otherwise specified.)

Parameter		Symbol	Value	Unit	
Maximum repetitive peak reverse voltage		VRRM	100	V	
Maximum average forward rectified current	Per leg	IE(A\/)	30	^	
	Total device	IF(AV)	60	A	
Peak forward surge current 8.3ms single ha superimposed on rated load (JEDEC metho	IFSM	300	А		
Operating junction and Storage temperature range		TJ ,Tstg	-55 to+150	$^{\circ}$	
Typical thermal resistance3)		RθJC	2.5	°C/W	

# **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C, unless otherwise specified)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage (Per leg)	IF=10.0A		\/_	0.75		V
	IF=20.0A		VF	0.85	0.9	\ \ \
Reverse Current	VR=100V	TA=25℃	IR		50	μA
		TA=125℃		8		mA

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#### TYPICAL CHARACTERISTICS

FIG. 1- FORWARD CURRENT DERATING CURVE

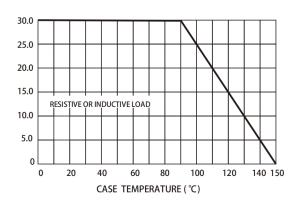


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

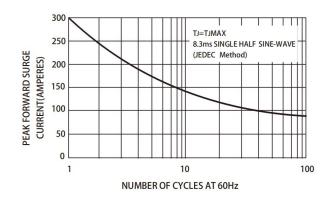


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

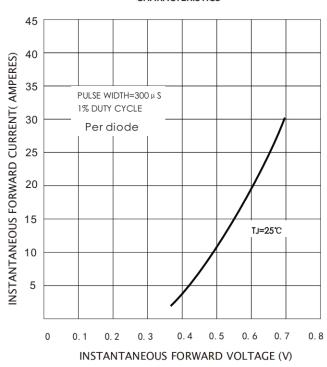
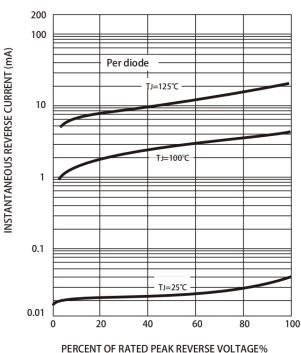


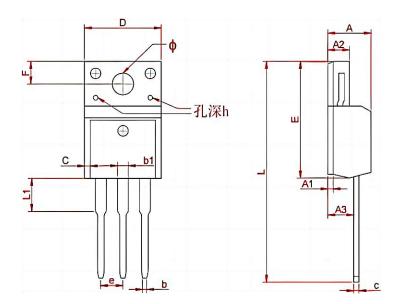
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%

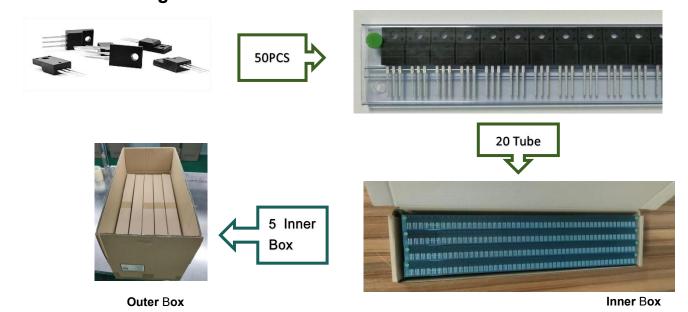


## **TO - 220F Package Outline Dimensions**



Symbol	Dimensions In Millimeters			
Symbol	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		
С	1.08	1. 200		
С	0.480	0.520		
D	10. 15	10. 450		
Е	15. 700	15. 950		
е	2. 574 TYP			
F	3. 470 REF			
у	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	Per Tube (pcs)	Tube per box	Inner box dimensions LxW×H	PCS/ Inner box	Outer box dimensions L×W×H(mm)	PCS/ Outer box
	(mm)			(mm)		. 32	
TO-220F	530*32*7	50	20	580*155*50	1000	602*277*188	5000

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