

TO-220 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

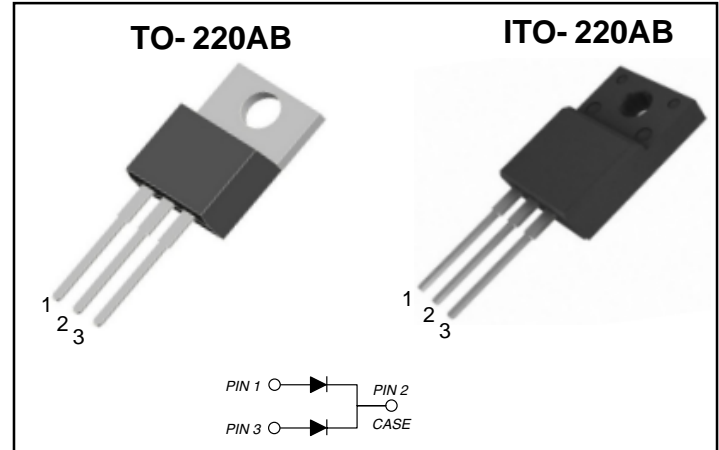
- I_o 20A
- V_{RRM} 100V
- High surge current capability
- Low V_f

Applications

- Rectifier

Marking

- MBR20100L(F)CT



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	MBR20100L(F)CT
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Rectified Output Current	I_o	A	60HZ Half-sine wave, Resistance load, T_c (Fig.1)	20.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , $T_a = 25^\circ\text{C}$	150
Junction Temperature	T_J	$^\circ\text{C}$		-55~+150
Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	MBR20100L(F)CT	
Peak Forward Voltage	V_F	V	$I_F = 10.0\text{A}$	0.75	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM} = V_{RRM}$	$T_a = 25^\circ\text{C}$	0.3
	I_{RRM2}			$T_a = 125^\circ\text{C}$	1.5
Thermal Resistance(Typical)	$R_{\theta J-C}$	$^\circ\text{C}/\text{W}$	Between junction and case	2.0 ¹⁾	

Notes:

Thermal resistance from junction to case per leg with heat-sink size of 2"×3"×0.25" AL-plate

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

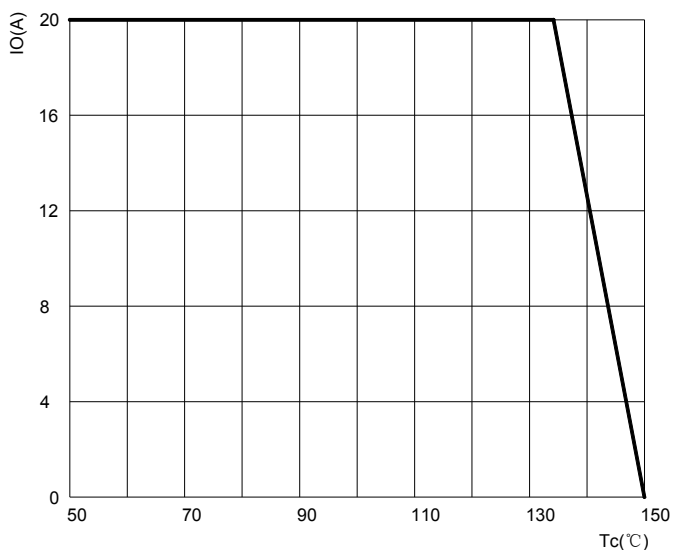


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

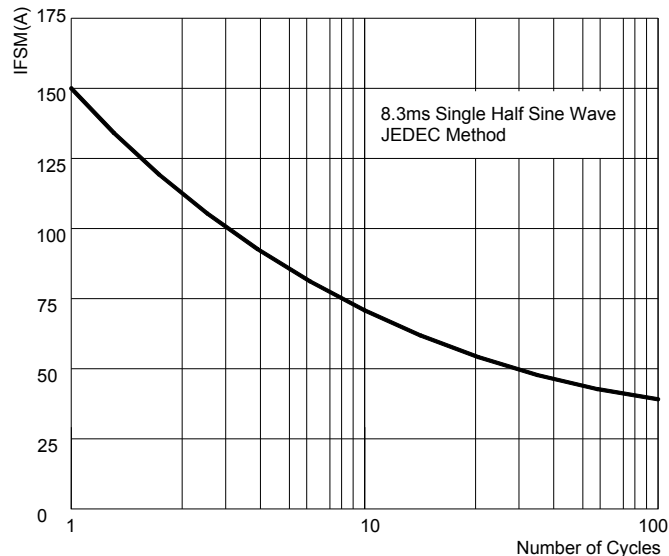


FIG3: Instantaneous Forward Voltage

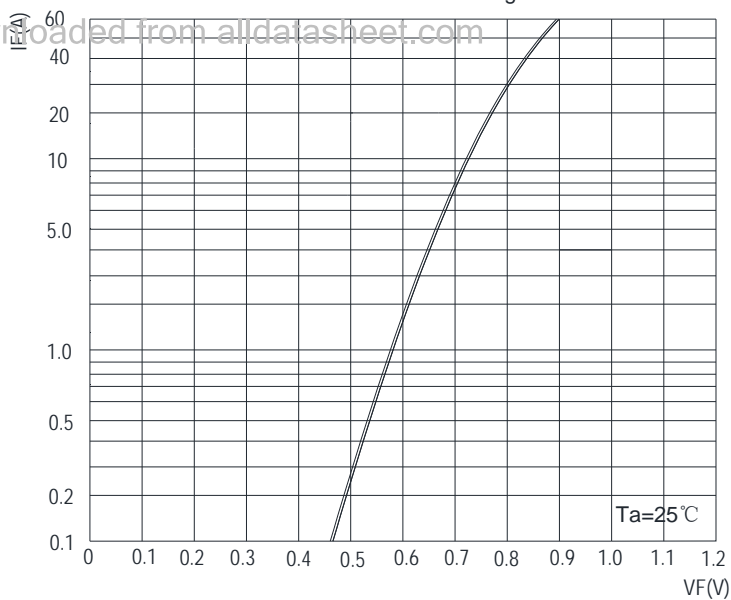
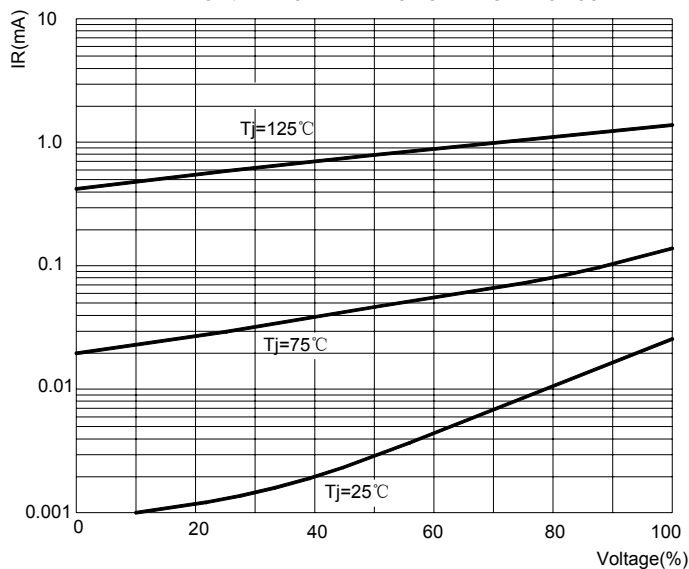
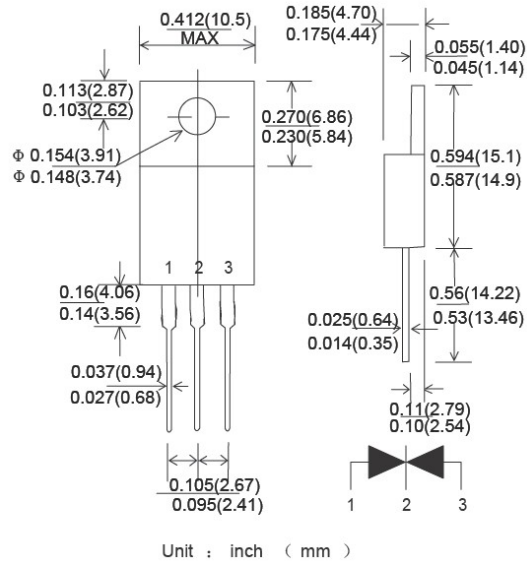


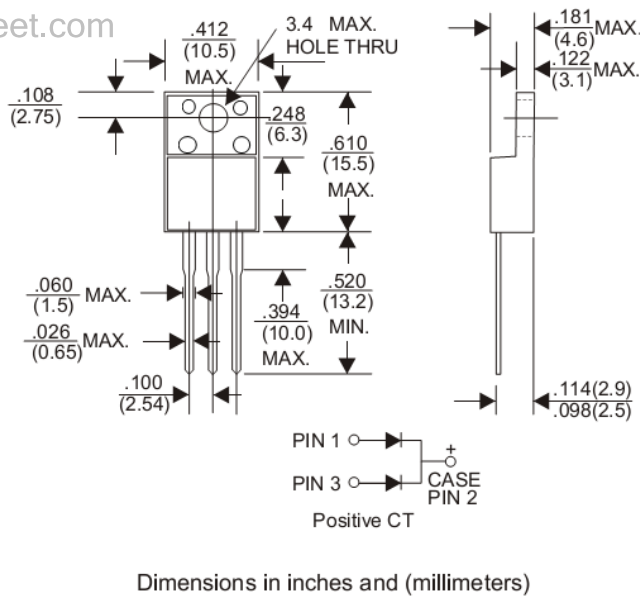
FIG.4: TYPICAL REVERSE CHARACTERISTICS



TO-220AB



ITO-220AB



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