

## TO-220 Plastic-Encapsulate Diodes

### Schottky Rectifier

#### Features

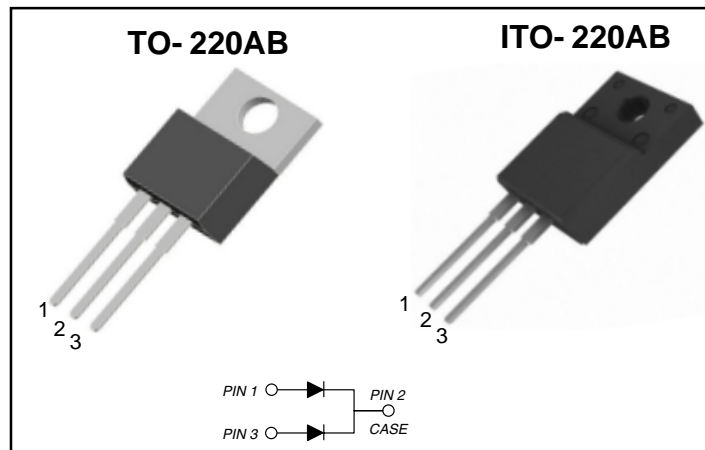
- $I_o$  20A
- $V_{RRM}$  100V
- High surge current capability
- Low  $V_f$

#### 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 <sup>1)</sup>	

#### 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

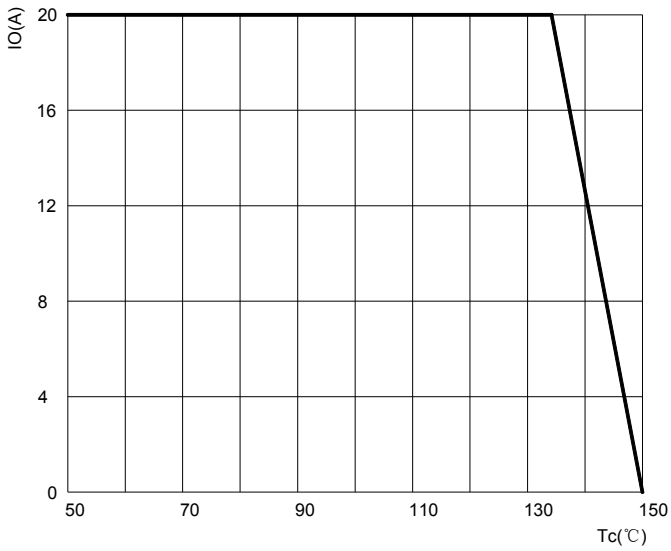


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

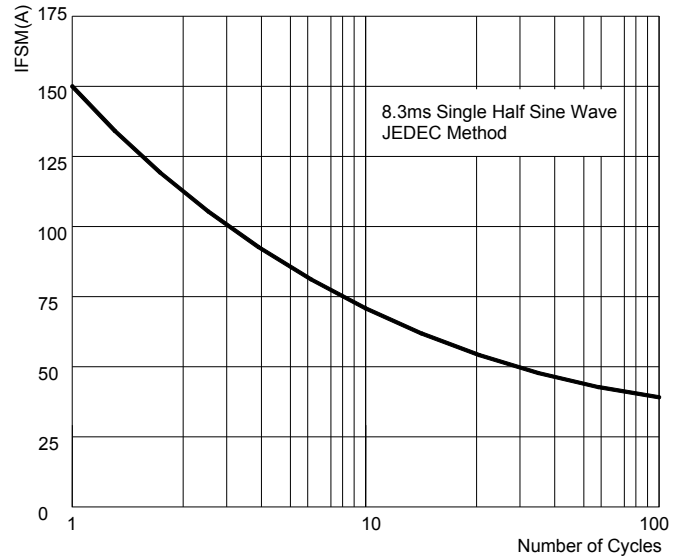


FIG3: Instantaneous Forward Voltage

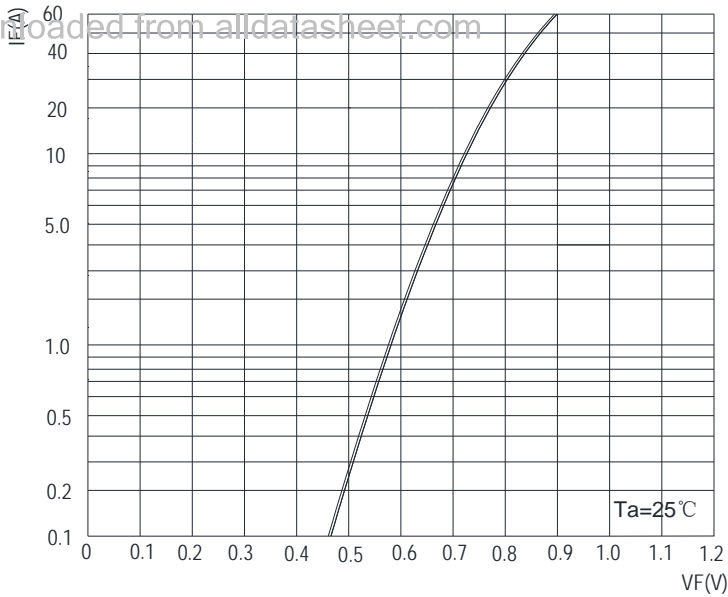
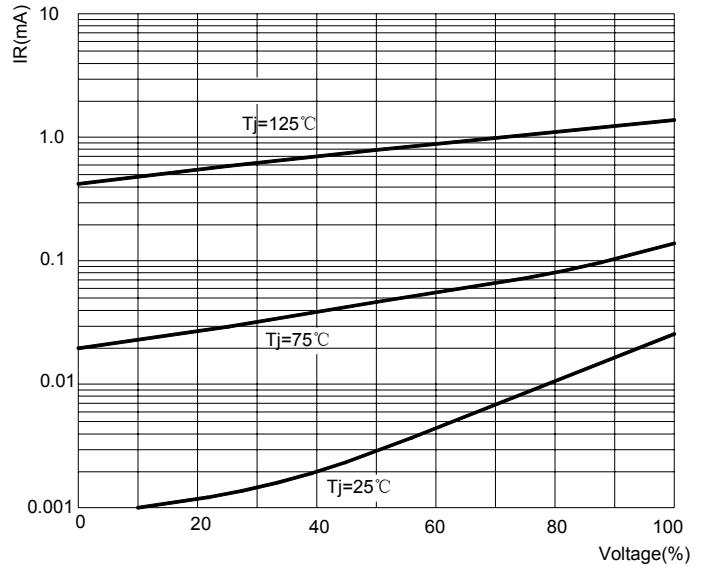
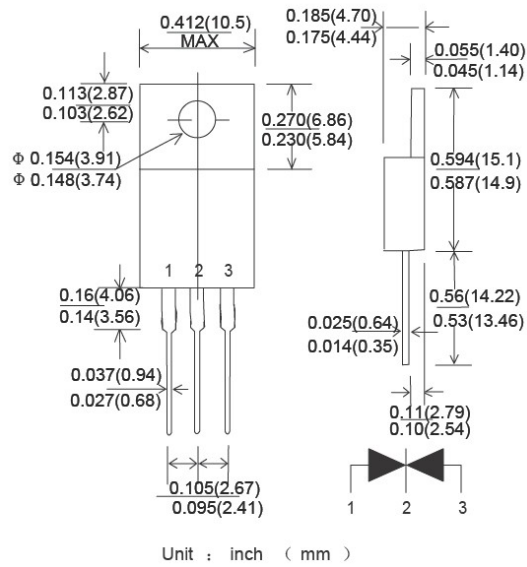


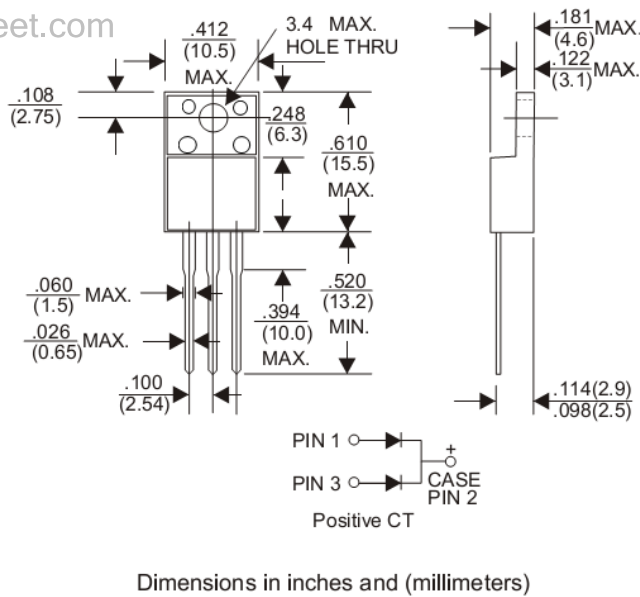
FIG.4: TYPICAL REVERSE CHARACTERISTICS



TO-220AB



ITO-220AB



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