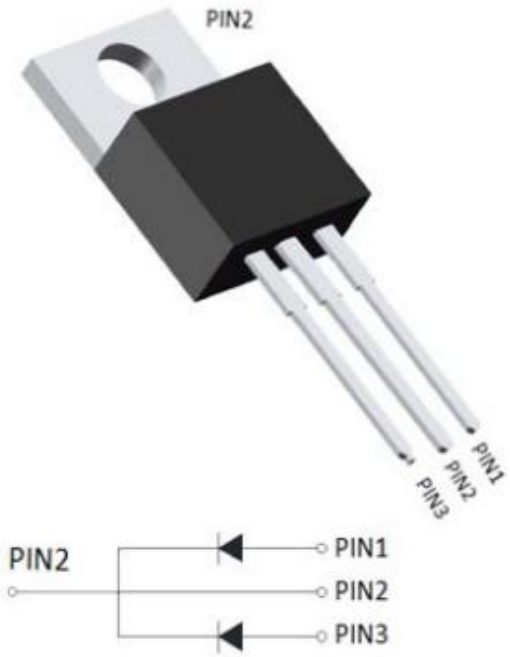
MBR1530CT THRU MBR1560CT

Schottky Rectifier

Features

- High efficiency operation
- Guard ring for enhanced ruggedness and long term reliablity
- High purity,high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Solder dip maximum peak of 275 °C /7s, per JESD 22-B106



Typical Application

For use in switching power supplies,converters, freewheeling diodes and reverse battery protection.

Mechanical Data

- Package: TO-220AB
  Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band denotes cathode end

■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	MBR15-CT					
				30	35	40	45	50	60
Repetitive Peak Reverse Voltage	V_{RRM}	V		30	35	40	45	50	60
Average Rectified Output Current	I_O	A	60HZ Half-sine wave, Resistance load, Tc(Fig.1)	15					
Surge(Nonrepetitive)Forward Current	I_{FSM}	A	60HZ sine wave, 1 cycle, Ta=25℃	150					
Storage Temperature	T_{stg}	℃		-55 ~ +150					
Junction Temperature	T_j	℃		-55 ~ +155					

Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions		MBR15-CT					
					30	35	40	45	50	60
Peak Forward Voltage	V_{FM}	V	I_{FM}=7.5A		0.65				0.75	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta=25℃	0.1				1.0	
	I_{RRM2}			Ta=125℃	15				50	
Thermal Resistance	$R_{\theta J-C}$	℃/W	Between junction and case		2.0[1)]					

NOTES:

[1)]Thermal resistance from junction to case per leg with heat-sink size of 2”x3”x0.25”A-L plate

MBR1530CT THRU MBR1560CT

Schottky Rectifier

■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

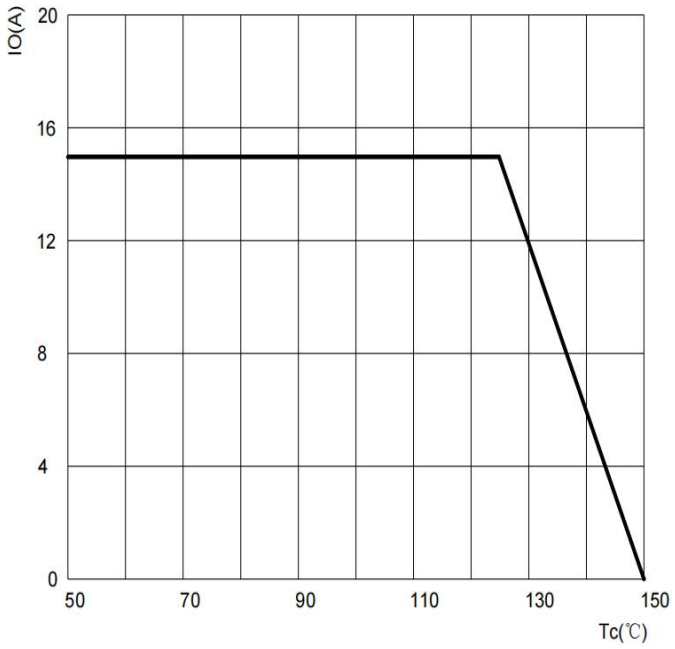


FIG2:Surge Forward Current Capability

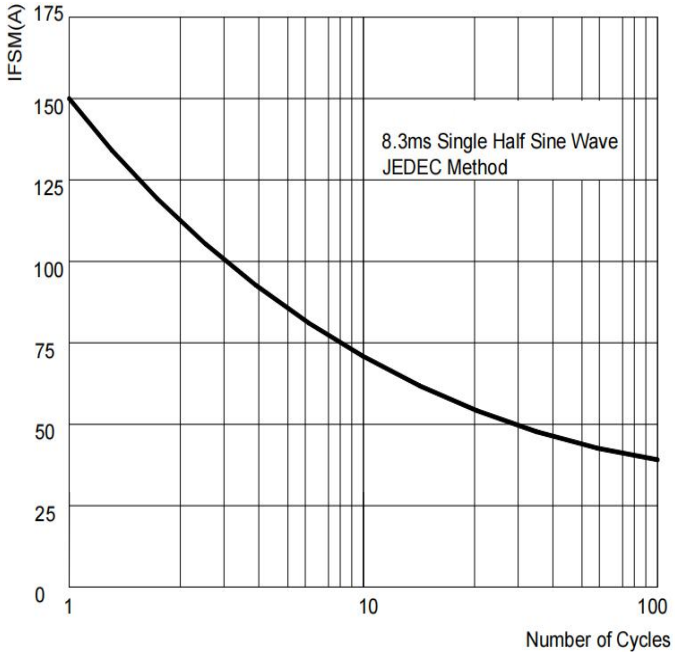


FIG3:Instantaneous Forward Voltage

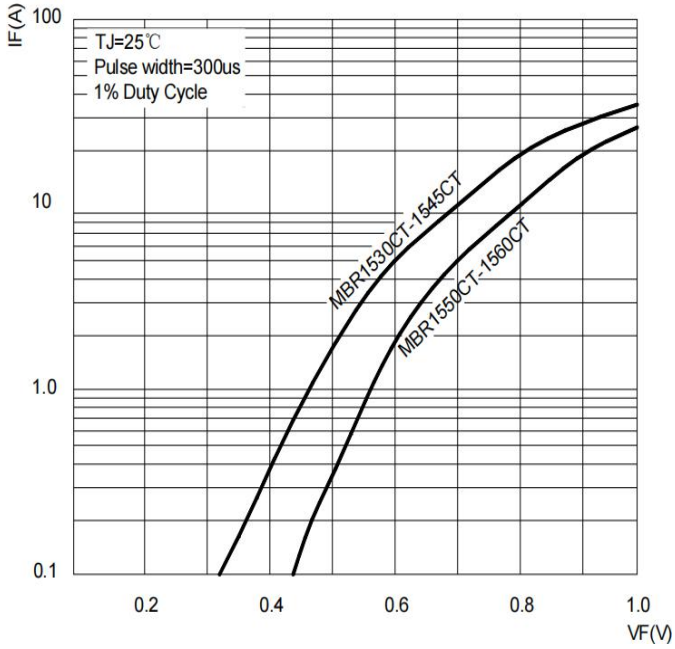
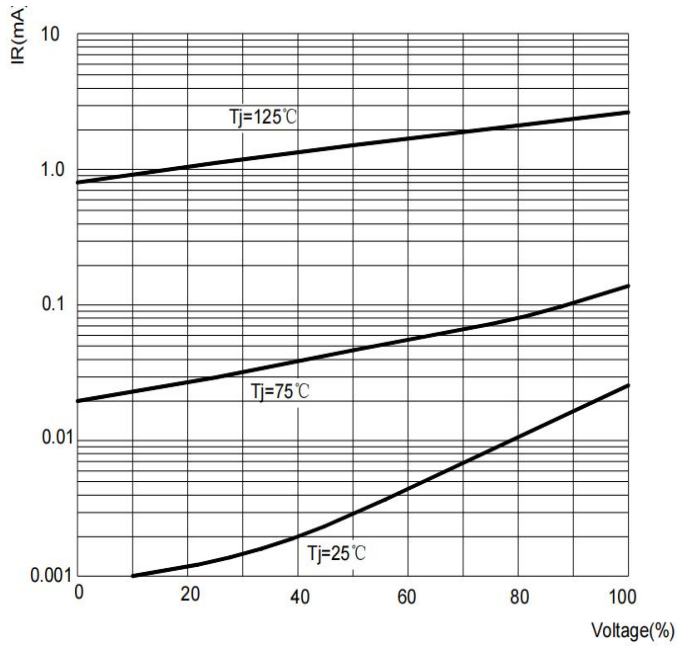


FIG4:Typical Reverse Characteristics



MBR1530CT THRU MBR1560CT

Schottky Rectifier

■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR1530CT ~MBR1560CT	TO-220AB	50	1000	5000	Tube

■ Outline Dimensions