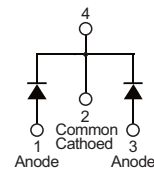


## ■ PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	100V
VF(@IF=20A)	0.83V
IR(@VR=100V)	50uA
ID	40A

## Symbol

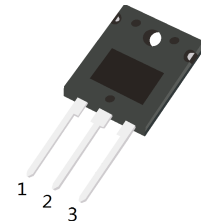


## ■ MECHANICAL CHARACTERISTICS

- \* Case: Epoxy, Molded
- \* Finish: All External Surfaces Corrosion Resistant and Terminal
- \* Leads are Readily Solderable
- \* Lead Temperature for Soldering Purposes:  
260 °C Max. for 10 Seconds

## ■ FEATURES

- \* Guard Ring for Stress Protection
- \* Low Forward Voltage
- \* Low Power Loss/High Efficiency
- \* High Surge Capacity
- \* Low Stored Charge Majority Carrier Conduction
- \* Pb Free Packages are Available\*



TO-247S

## ■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-Free	Halogen		
N/A	MBR40100W	TO-247S	30 pieces/Tube

## ■ MAIMUM RATINGS(Each diode leg)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Average Rectified Output Current	(Total)	40	A
	(per Leg)	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Reate Load	$I_{FSM}$	400	A
Operationg and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 175	°C

## ■ ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Test Conditions	Min	Typ.	Max	Unit
Peak Repetitive Reverse Voltage	$B_V$	$I_c=0.5mA, T_J=25^\circ C$	—	108	—	V
Forward Voltage Drop	$V_F$	$I_F=20A, T_J=25^\circ C$	—	0.8	0.83	V
Leakage Current	$I_R$	$V_R=100V, T_J=25^\circ C$	—	—	0.05	mA
		$V_R=100V, T_J=125^\circ C$	—	—	6	

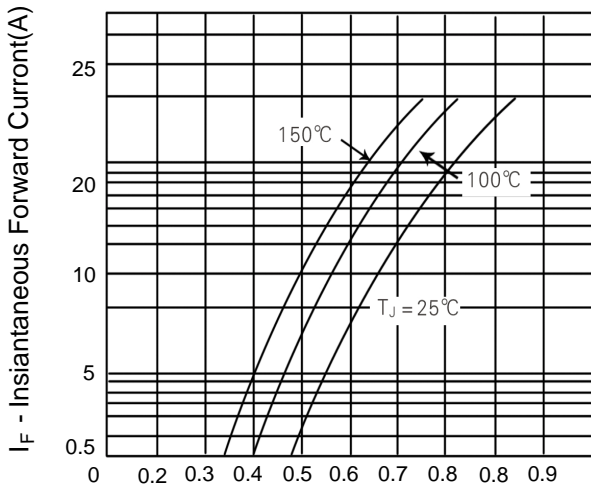


Figure 1. Typical Forward Voltage Per Diode

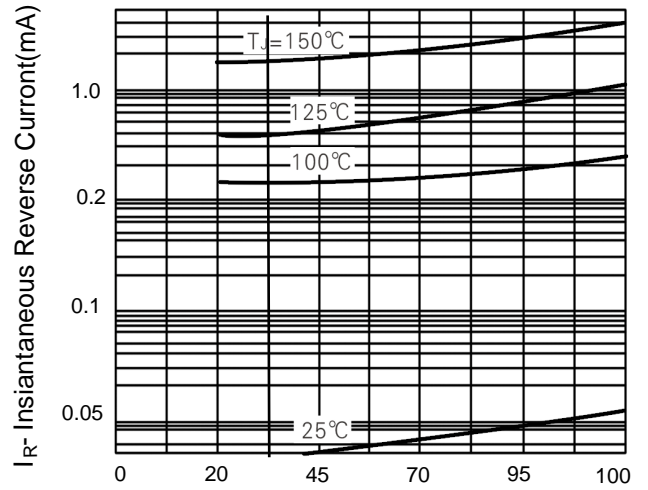
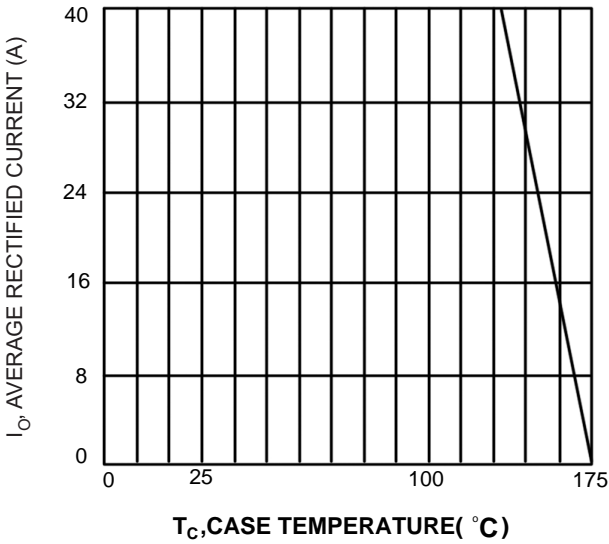
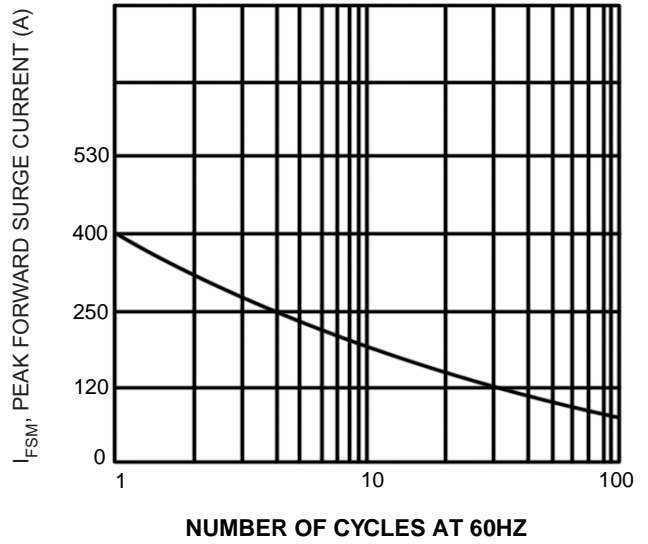


Figure 2. Typical Reverse Current Per Diode



$T_C$ , CASE TEMPERATURE ( °C)  
Fig.3 Forward Current Derating Curve



NUMBER OF CYCLES AT 60HZ  
Fig.4 Max Non-Repetitive Surge Current

■ TO-247S-3L PACKAGE OUTLINE DIMENSIONS

