

■ **PRODUCT CHARACTERISTICS**

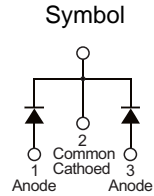
VR(@IC=0.5mA)	100V
VF(Typ@IF=15A)	0.83V
IR(@VR=100V)	50uA
ID	30A

■ **MECHANICAL CHARACTERISTICS**

- * Case: epoxy,molded
- * Finish:all external surfaces corrosion resistant and terminal
- * Leads are readily solderable
- * Leads 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 package are available



TO-247S

■ **ORDER INFORMATION**

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MBR30100W	TO-247S	30pieces/Tube

■ **MAXIMUM RATINGS (Each diode leg)**

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	100	V
Average rectified output current	Total	30	A
	Per leg	15	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate load	I_{FSM}	300	A
Operating and storage temperature range	T_J, T_{STG}	-55 to + 175	°C

■ **ELECTRICAL CHARACTERISTICS**

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	B_V	$I_C=0.5mA, T_J=25^\circ C$	100	-	-	V
Forward voltage drop	V_F	$I_F=15A, T_J=25^\circ C$	-	0.83	0.86	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	

■ TYPICAL CHARACTERISTICS

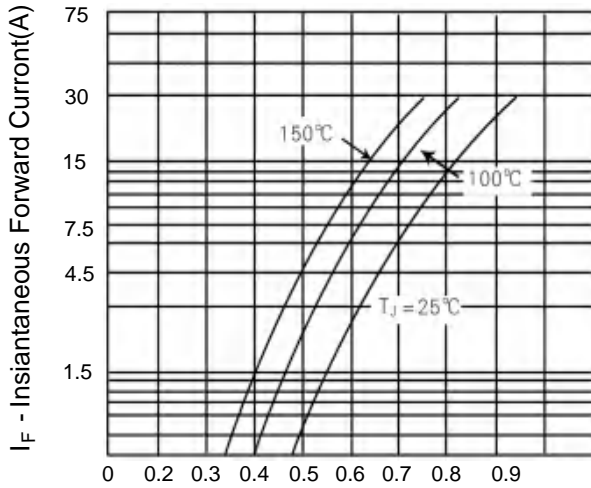


Figure 1. Typical Forward Voltage Per Diode

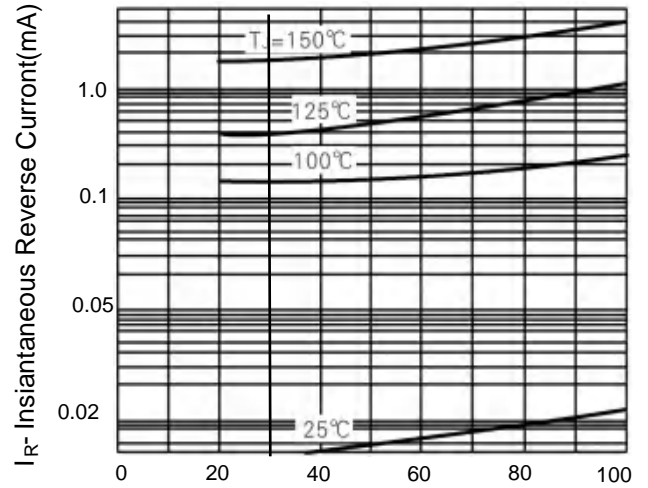


Figure 2. Typical Reverse Current Per Diode

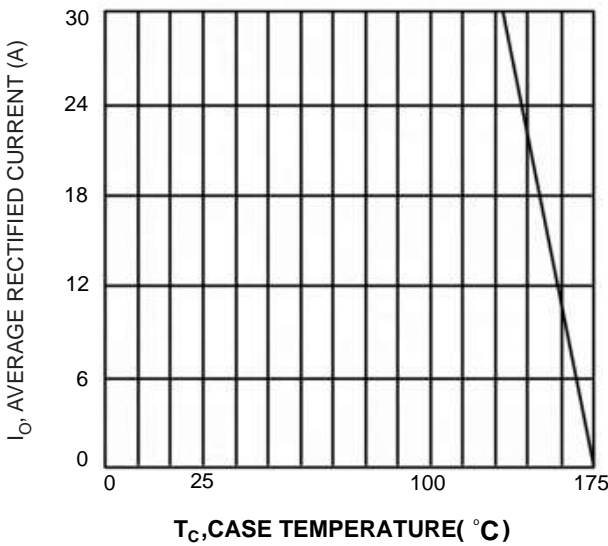


Fig.3 Forward Current Derating Curve

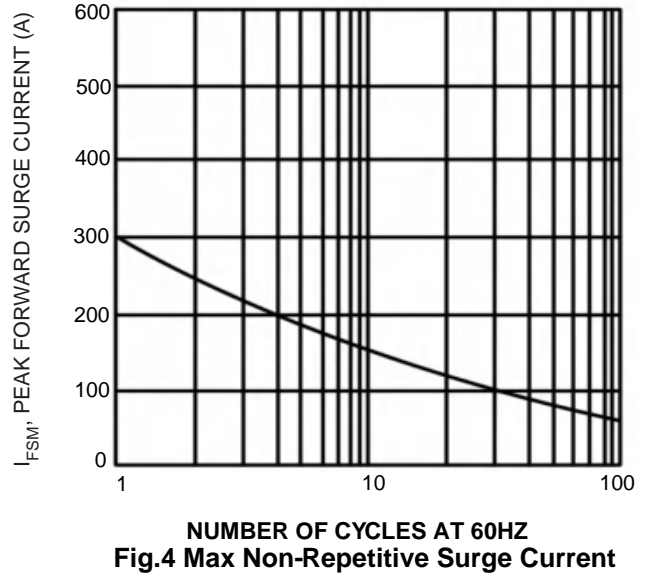


Fig.4 Max Non-Repetitive Surge Current

■ TO-247S PACKAGE OUTLINE DIMENSIONS

