

## STANDARD RECOVERY DIODE MODULE TYPES 300A

### Features

High Surge Capability  
Types up to 1600V  $V_{RRM}$   
Isolation Type Package  
Electrically Isolation base plate

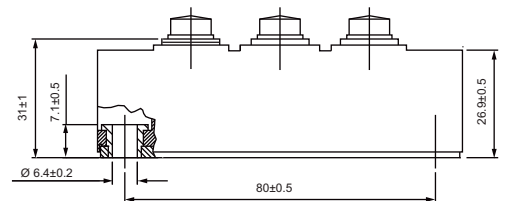
### Maximum Ratings

Operating Temperature :  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
Storage Temperature :  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$



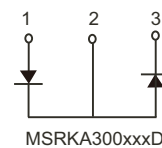
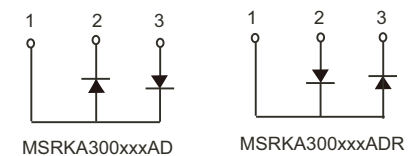
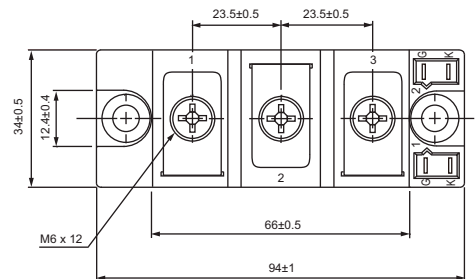
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MSRKA30080(A)D(R)	800V	560V	800V
MSRKA300100(A)D(R)	1000V	700V	1000V
MSRKA300120(A)D(R)	1200V	840V	1200V
MSRKA300140(A)D(R)	1400V	980V	1400V
MSRKA300160(A)D(R)	1600V	1120V	1600V

Dimensions in mm (1 mm = 0.0394")



### Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per diode)	$I_{F(AV)}$	300A	$T_C = 100^{\circ}\text{C}$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	6500A	8.3ms , half sine
Maximum Instantaneous Forward Voltage *	$V_F$	1.20V	$I_{FM}=300\text{A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*	$I_R$	40 $\mu\text{A}$ 8mA	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Isolation Voltage	$V_{isol}$	3000V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.28°C/W	



\*Pulse Test: Pulse Width 300  $\mu\text{sec}$ , Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

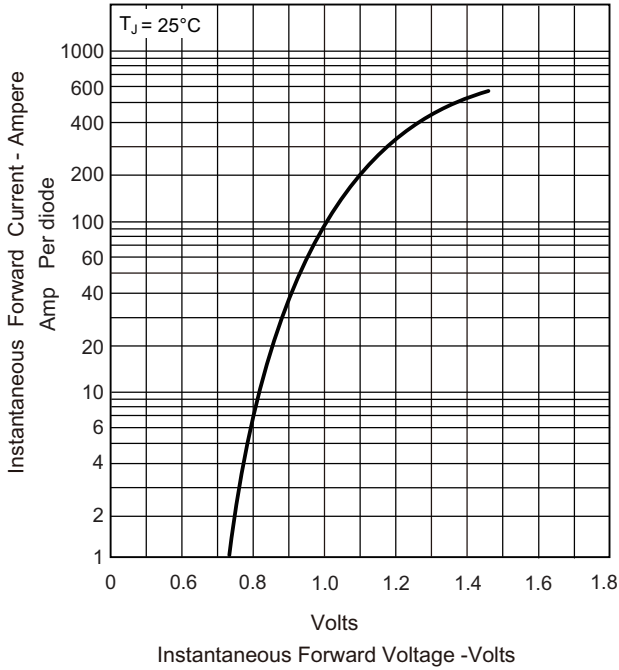


Figure .2-Forward Derating Curve

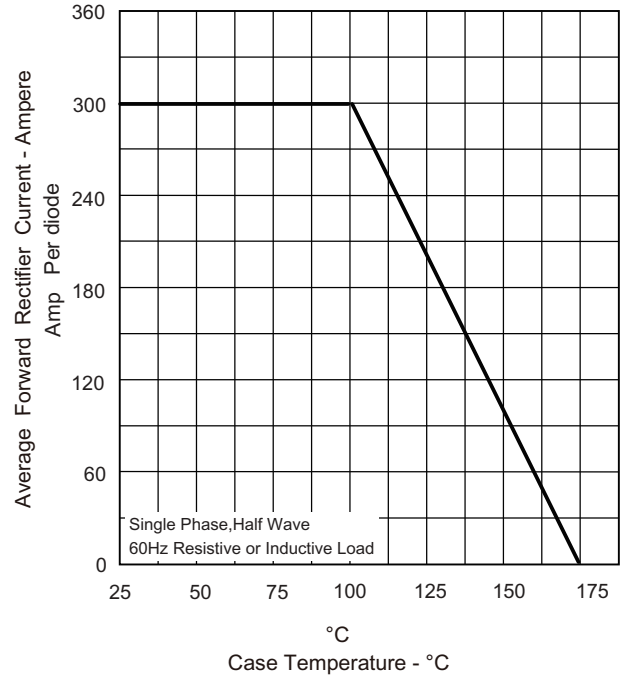


Figure .3-Peak Forward Surge Current

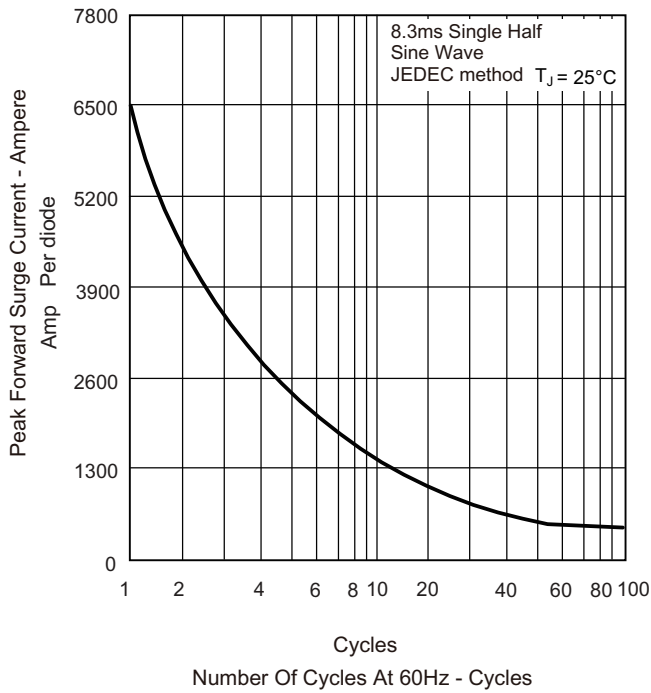
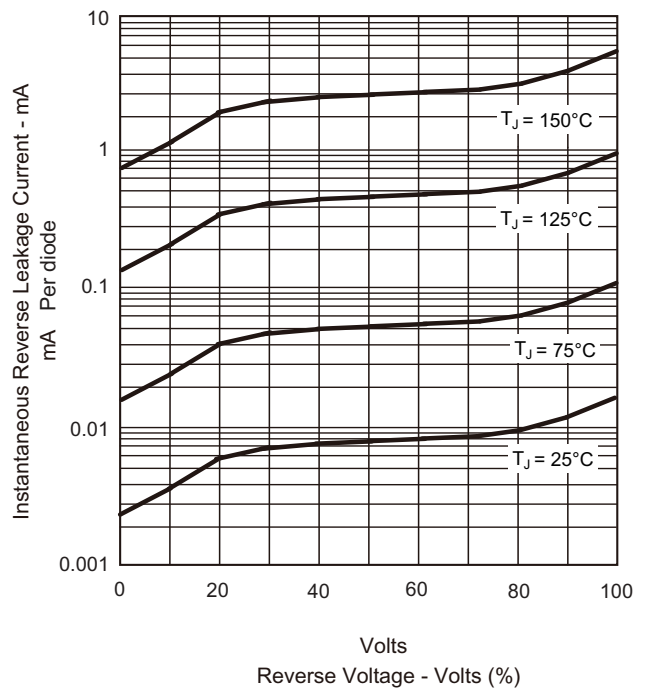


Figure .4-Typical Reverse Characteristics





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