



SUPER FAST DIODE MODULE TYPE 300A

Features

- High Surge Capability
- Type 600V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

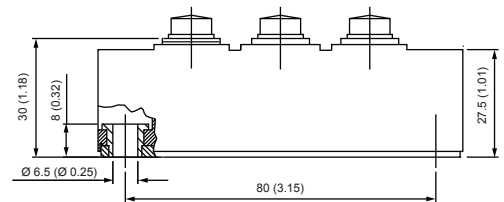


Maximum Ratings

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

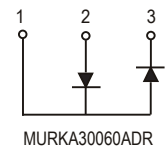
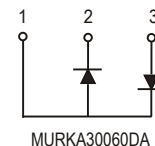
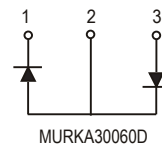
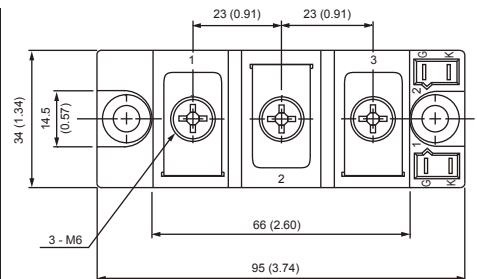
Dimensions in mm (1 mm = 0.0394")

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURKA30060(A)D(R)	600V	420V	600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per leg)	$I_{F(AV)}$	300A	$T_C = 100^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	6000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * (Per leg)	V_F	1.35V 1.15V	$I_{FM} = 300\text{A}; T_J = 25^{\circ}\text{C}$ $I_{FM} = 300\text{A}; T_J = 125^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per leg)	I_R	$25 \mu\text{A}$ 5 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time (Per leg)	T_{rr}	200ns	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{RR} = 0.25\text{A}$
Isolation Voltage	V_{isol}	3000V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.14°C/W 0.28°C/W	Per pkg Per leg



*Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%



Figure .1- Typical Forward Characteristics

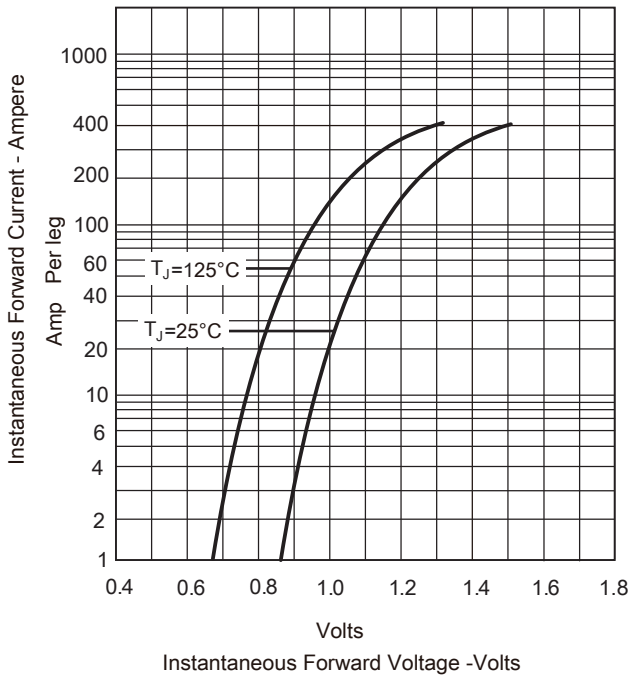


Figure .2-Forward Derating Curve

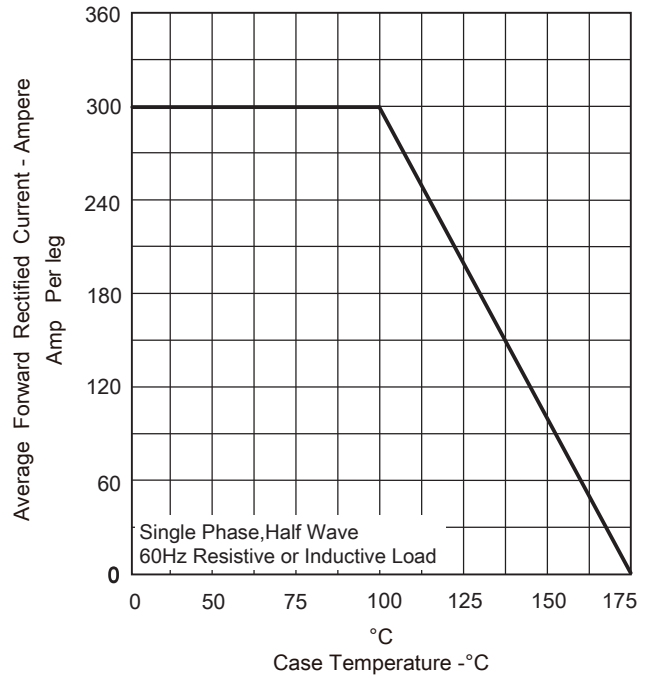


Figure .3- Peak Forward Surge Current

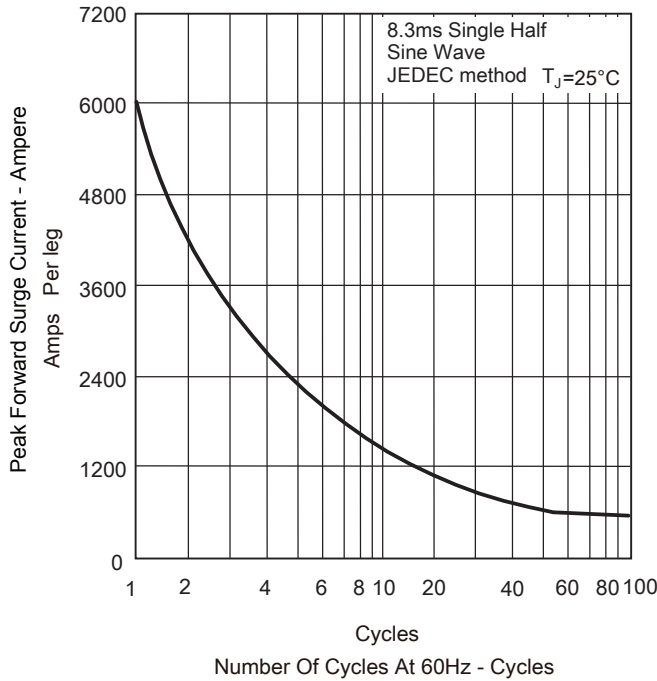


Figure .4-Typical Reverse Characteristics

