

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Glass passivated chip junction
- Moisture Sensitivity Level 1
- AEC-Q101 qualified

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Case(Note3)
- Typical Thermal Resistance: 20°C/W Junction to Lead(Note3)
- Typical Thermal Resistance: 70°C/W Junction to Ambient(Note3)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS2DQ	MURS2D	200V	140V	200V

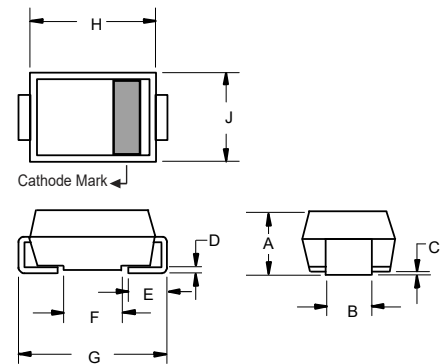
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current	$I_{F(AV)}$	2A	$T_L=100^\circ\text{C}$	
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, Half Sine	
Instantaneous Forward Voltage	V_F	0.92V(Max.)	$I_F=2\text{A}; T_J=25^\circ\text{C}$	
Reverse Current At Rated DC Blocking Voltage	I_R	2uA(Max.) 50uA(Max.)	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$	
Typical Junction Capacitance	C_J	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$	
Reverse Recovery Time	t_{rr}	25ns(Max.)	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{RR}=0.25\text{A}$	
		26ns(Typ.)	$I_F=1\text{A}; di/dt=-50\text{A}/\mu\text{s}; V_R=30\text{V}$	
		25ns(Typ.)	$T_J=25^\circ\text{C}$	$I_F=2\text{A}$ $di/dt=-200\text{A}/\mu\text{s}$ $V_R=100\text{V}$
		30ns(Typ.)	$T_J=125^\circ\text{C}$	
Peak recovery current	I_{RRM}	3.5A(Typ.) 6.0A(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	
Reverse recovery charge	Q_{rr}	47nC(Typ.) 85nC(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	

- Note:
1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.
 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 3. Mounted on P.C.B. With 0.3" x 0.3" (8.0 mm x 8.0 mm) Copper Pad Areas.

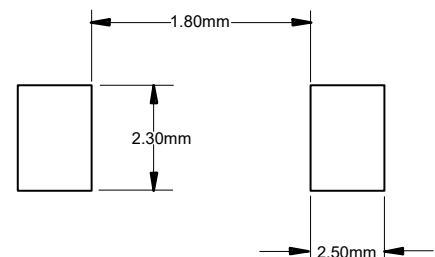
**2 Amp
Surface Mount
Super Fast
Recovery Rectifier
200 Volts**

SMB (DO-214AA)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

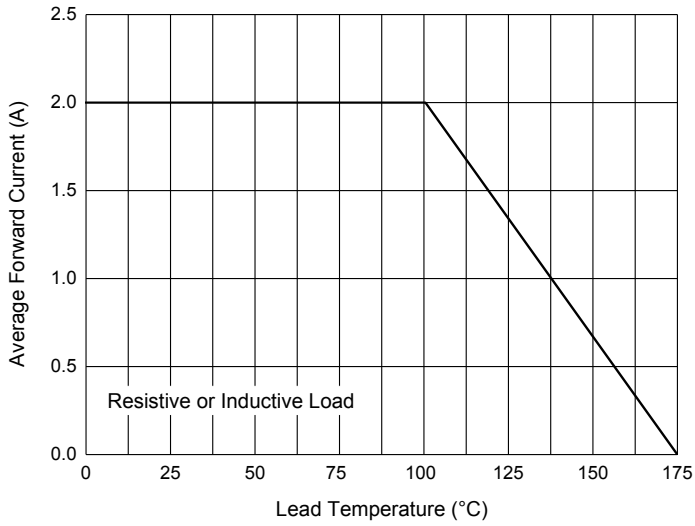


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

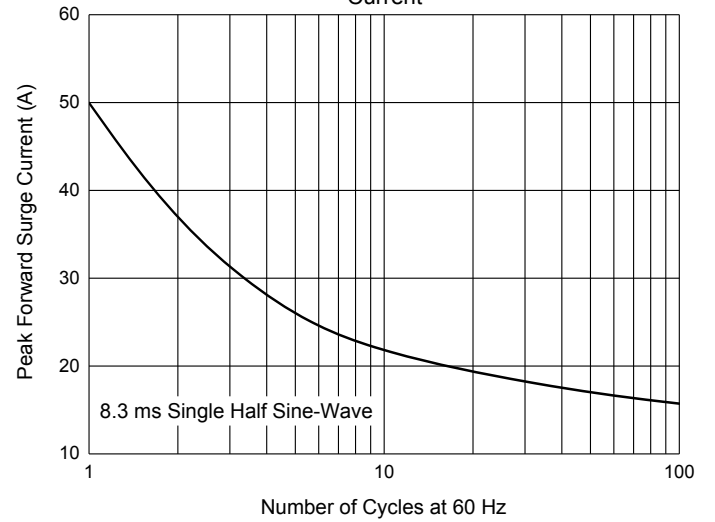


Fig. 3 - Typical Instantaneous Forward Characteristics

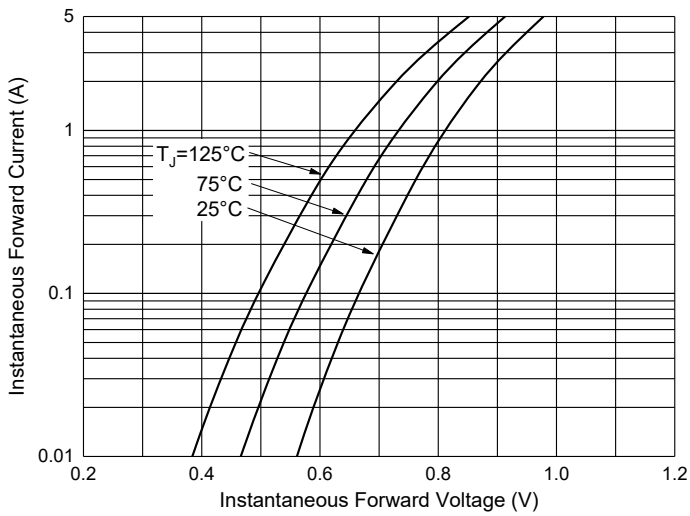
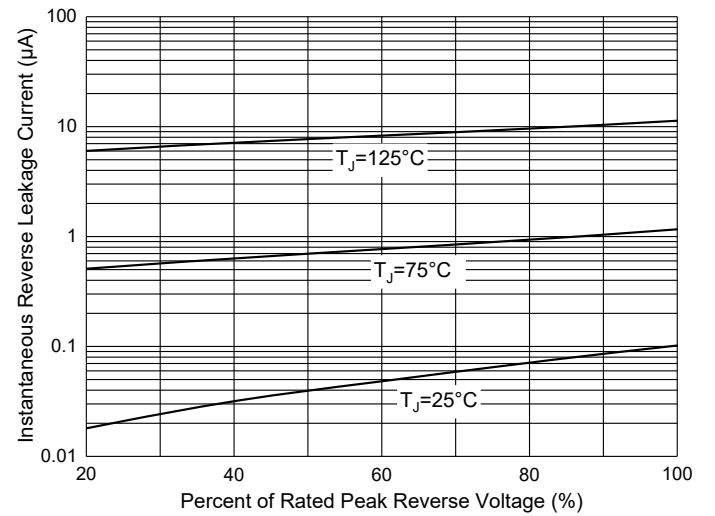


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
MURS2DQ-TP	Tape&Reel: 3Kpcs/Reel

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