

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Glass Passivated Chip
- Super Fast Switching For High Efficiency
- Low Reverse Leakage Current
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -50°C to +150°C
- Storage Temperature Range: -50°C to +150°C
- Maximum Thermal Resistance; 20°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
US2A	US2A	50V	35V	50V
US2B	US2B	100V	70V	100V
US2C	US2C	150V	105V	150V
US2D	US2D	200V	140V	200V
US2G	US2G	400V	280V	400V
US2J	US2J	600V	420V	600V
US2K	US2K	800V	560V	800V
US2M	US2M	1000V	700V	1000V

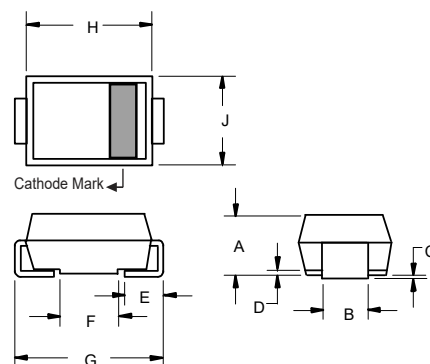
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	US2A-US2D: 1.0V US2G: 1.4V US2J-US2M: 1.65V	$I_{FM}=2.0A$; $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 200μA(Max) 16μA(Typ)	$T_J=25^\circ\text{C}$; $T_J=125^\circ\text{C}$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{RR}	US2A-US2G: 50ns US2J-US2M: 75ns	$I_F=0.5A$; $I_R=1.0A$; $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	28pF	Measured at 1.0MHz $V_R=4.0V$

Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

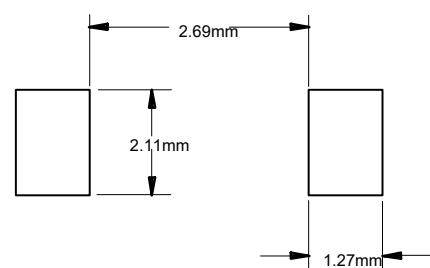
2 Amp Ultra Fast Rectifier 50 to 1000 Volts

SMB (DO-214AA)



DIMENSIONS					
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

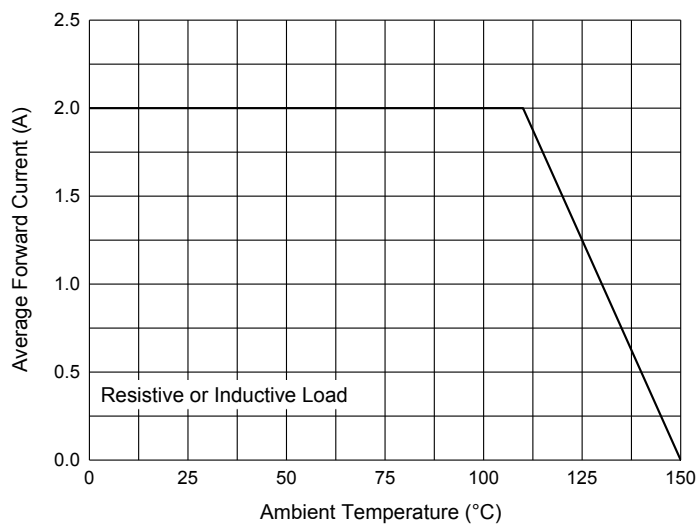


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

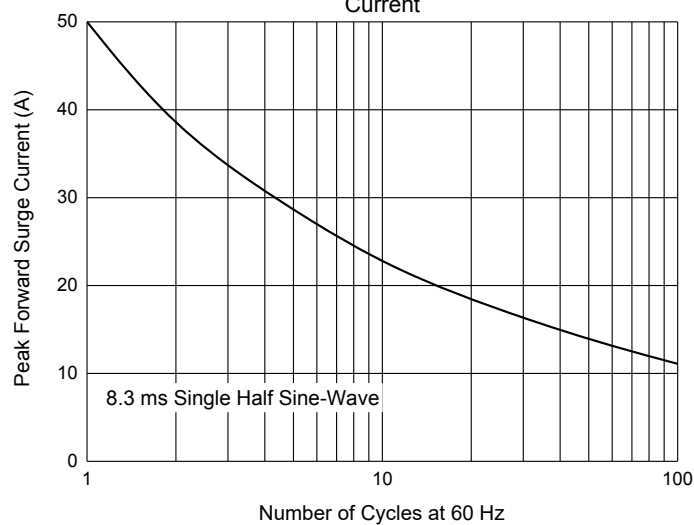


Fig. 3 - Typical Instantaneous Forward Characteristics

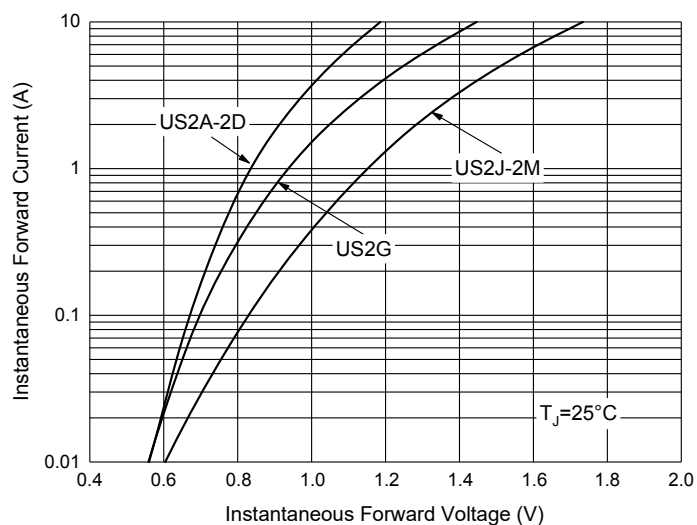
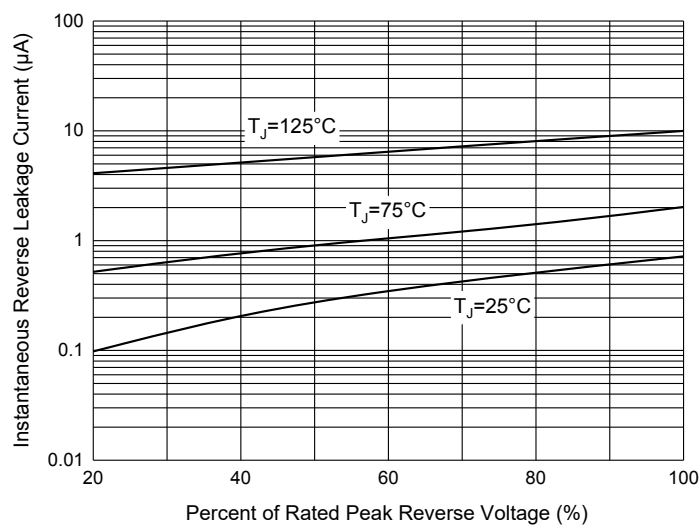


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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