

Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip
- Super Fast Switching For High Efficiency
- Low Reverse Leakage Current
- Lead Free Finish/RoHS Compliant(Note 2) ("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
US2AA	US2A	50V	35V	50V
US2BA	US2B	100V	70V	100V
US2CA	US2C	150V	105V	150V
US2DA	US2D	200V	140V	200V
US2GA	US2G	400V	280V	400V
US2JA	US2J	600V	420V	600V
US2KA	US2K	800V	560V	800V
US2MA	US2M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

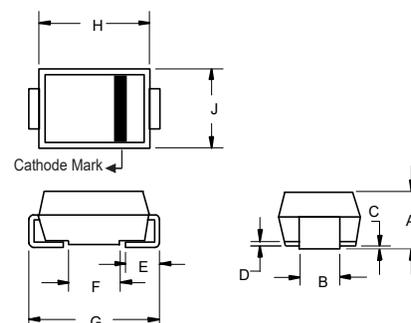
Parameter	Symbol	Value	Conditions
Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.0V 1.4V 1.7V	$I_{FM}=2.0A$; $T_A=25^\circ\text{C}$
US2AA-US2DA			
US2GA			
US2JA-US2MA			
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μA 50 μA	$T_A=25^\circ\text{C}$; $T_A=125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	50ns 75ns	$I_F=0.5A$; $I_R=1.0A$; $I_{rr}=0.25A$
US2AA-US2GA			
US2JA-US2MA			
Typical Junction Capacitance	C_J	28pF	Measured at 1.0MHz, $V_R=4.0V$

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

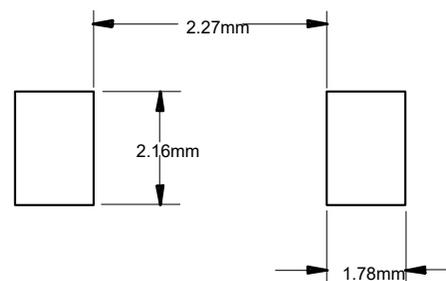
2 Amp Ultra Fast Rectifier 50 to 1000 Volts

SMA (DO-214AC)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	0.002	0.008	0.051	0.203	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
H	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

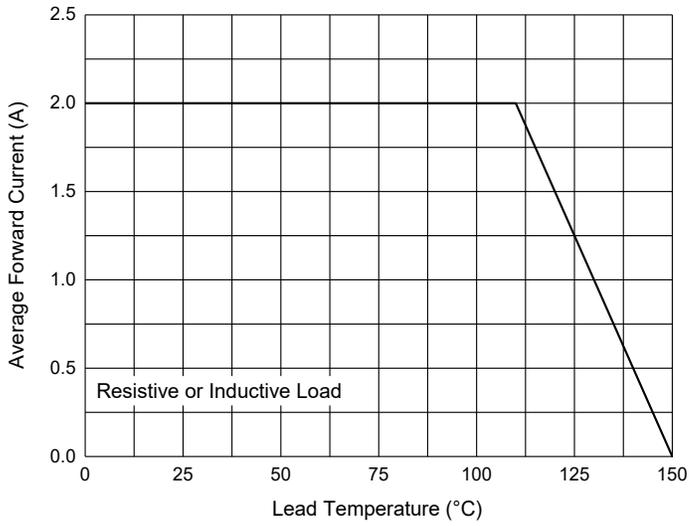


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

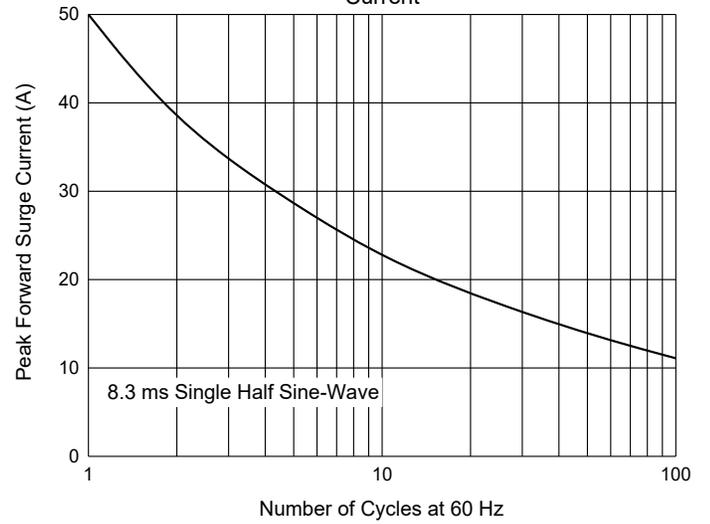


Fig. 3 - Typical Instantaneous Forward Characteristics

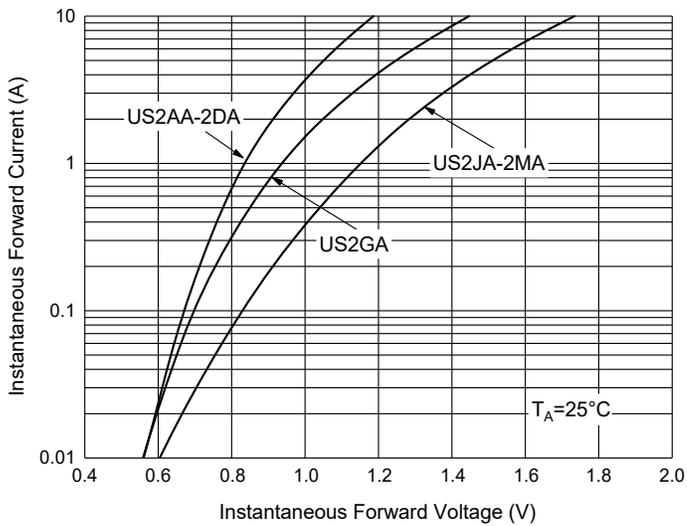
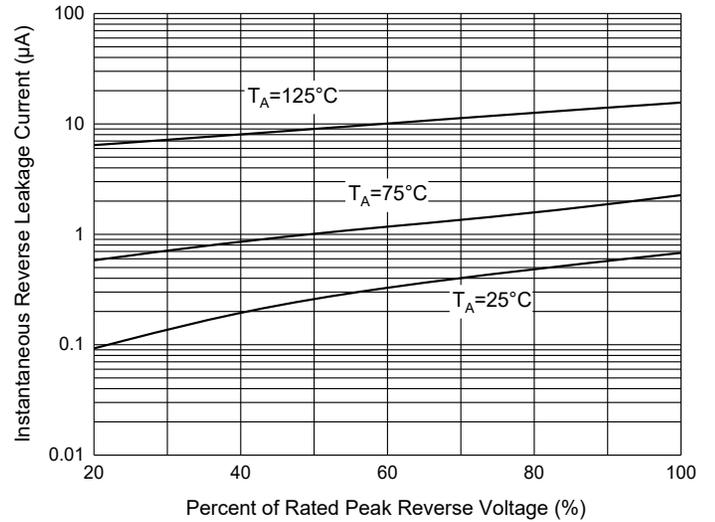


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

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