

**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
- Moisture Sensitivity Level 1

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 85 °C/W Junction to Ambient
- Maximum Thermal Resistance: 22°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HS2K	HS2K	800V	560V	800V

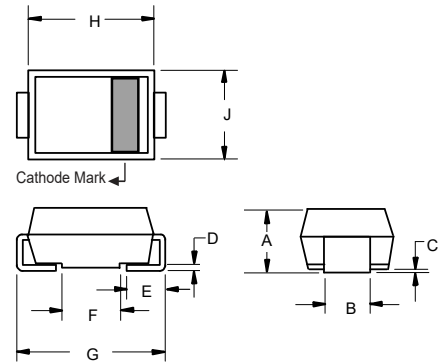
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.85V	$I_{FM}=2.0A$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5µA 0.1mA	$T_A=25^\circ\text{C};$ $T_A=125^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{RR}$	35ns	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A$

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.

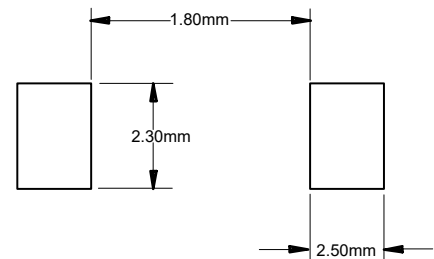
**2 Amp Super Fast Recovery Rectifier  
800 Volts**

**SMB (DO-214AA)**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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. 3 - Forward Current Derating Curve

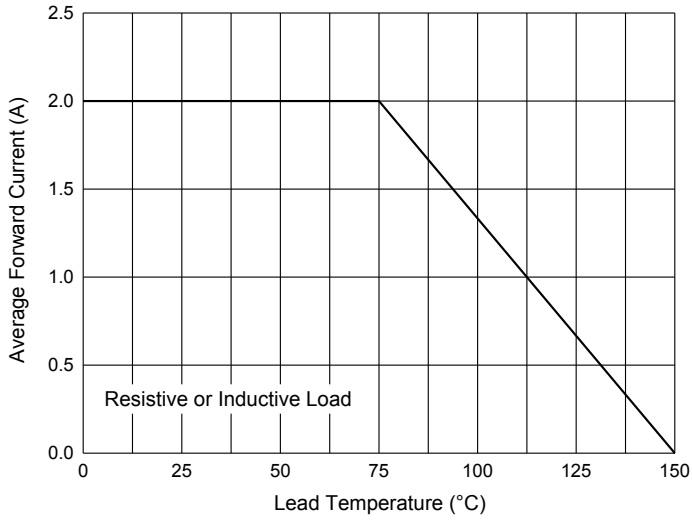


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

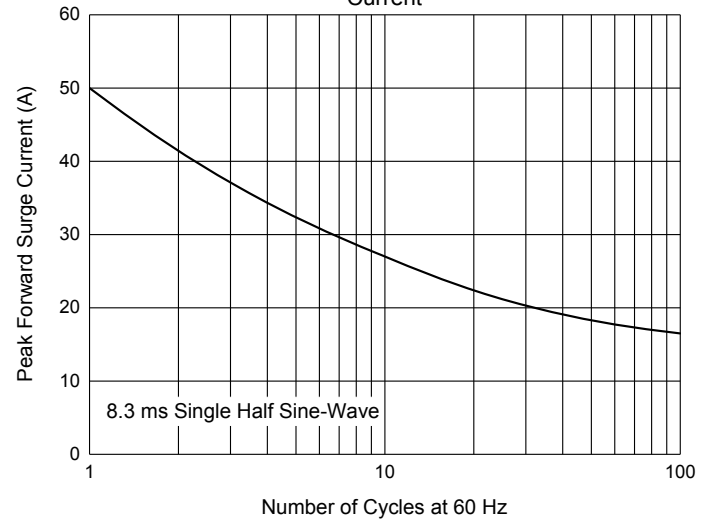


Fig. 3 - Typical Instantaneous Forward Characteristics

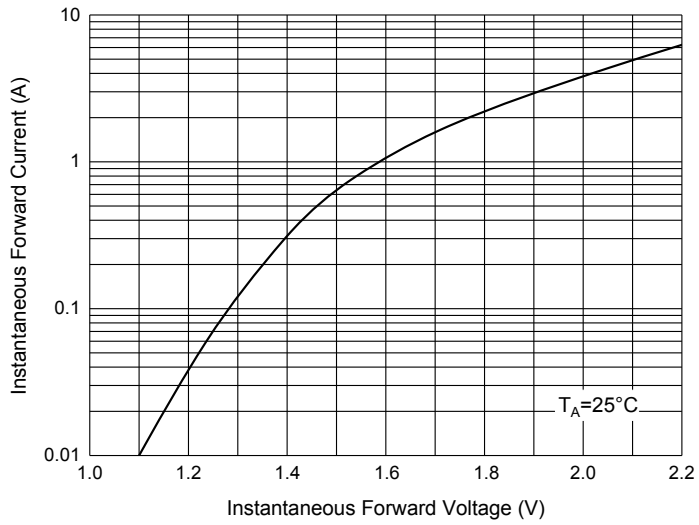
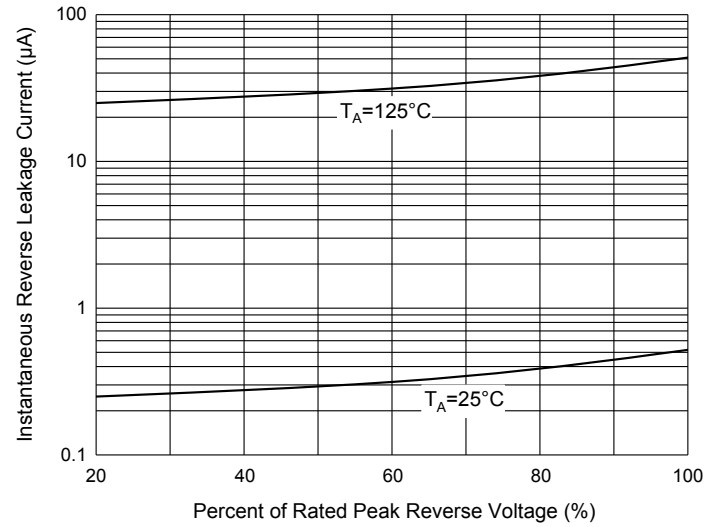


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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