

Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- High Current Capability
- For Surface Mount Application
- 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: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance(Note 3) : 45°C/W Junction to Ambient
- Typical Thermal Resistance(Note 3) : 12°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK820LHE3	SK820	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8.0A	$T_L=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	0.80V(Typ.) 0.90V(Max.) 0.80V(Max.)	$I_{FM}=8.0A; T_J=25^\circ\text{C}$ $I_{FM}=8.0A; T_J=25^\circ\text{C}$ $I_{FM}=8.0A; T_J=125^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10uA 200uA	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C};$
Voltage Rate of Change (Rated V_R)	dV/dt	10000 V/ μs	
Typical Junction Capacitance	C_J	165pF	Measured at 1.0MHz, $V_R=4.0V$

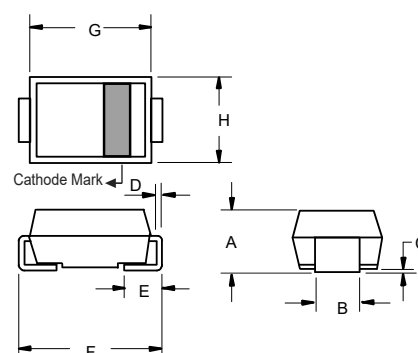
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

3. Mounted on P.C.B. With 0.6" x 0.6" (16 mm x 16 mm) Copper Pad Areas

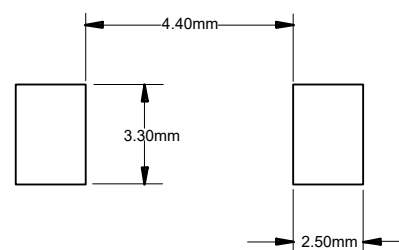
8.0 Amp Schottky Rectifier 200 Volts

SMC (DO-214AB)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.108	0.128	2.75	3.25	
C	0.002	0.008	0.051	0.203	
D	0.006	0.012	0.152	0.305	
E	0.030	0.060	0.76	1.52	
F	0.305	0.320	7.75	8.13	
G	0.260	0.280	6.60	7.11	
H	0.220	0.245	5.59	6.22	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

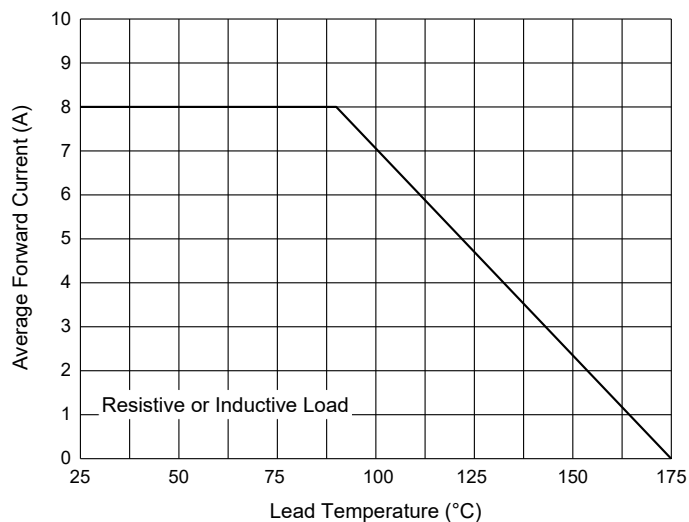


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

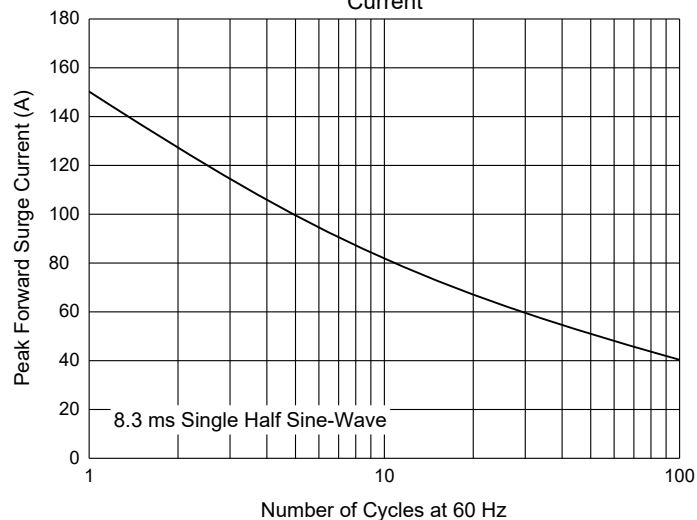


Fig. 3 - Typical Instantaneous Forward Characteristics

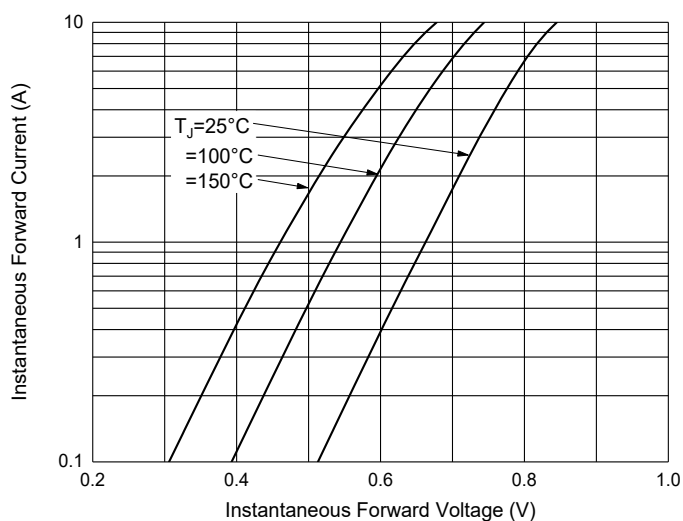
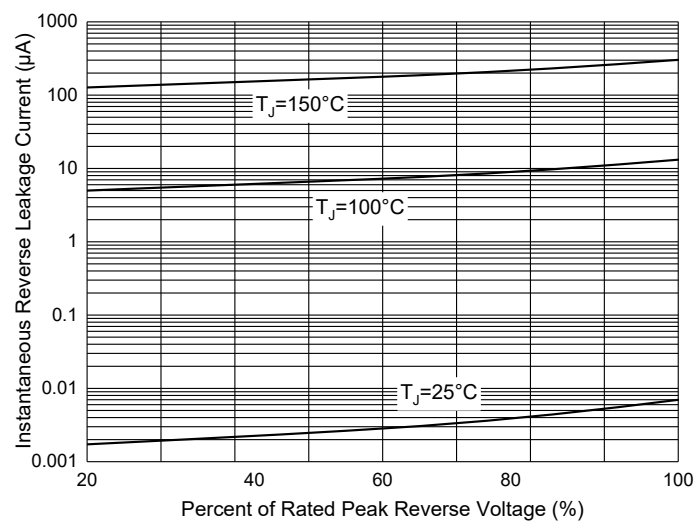


Fig. 4 - Typical Instantaneous Reverse Characteristics



Ordering Information

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

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