

#### **Features**

- Halogen Free. "Green" Device (Note 1)
- Guard Ring Protection
- Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters
- High Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +125°C
- Storage Temperature Range: -65°C to +150°C
- Maximum Thermal Resistance: 500°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5818LWS	SKL	30V	21V	30V

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

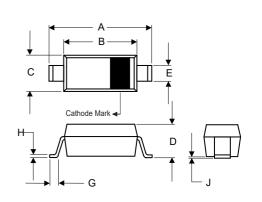
Average Forward Current	I <sub>F(AV)</sub>	1.0A	Tc = 90°C
Peak Forward Surge Current	I <sub>FSM</sub>	10A	8.3ms Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.45V	I <sub>FM</sub> =1.0A; T <sub>J</sub> = 25°C (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	200μΑ	T <sub>J</sub> = 25°C
Typical Junction Capacitance	C <sub>J</sub>	120pF	Measured at 1.0MHz , V <sub>R</sub> =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.

Note: 2. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

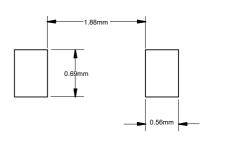
# 1 Amp Low VF Schottky Barrier Rectifier 30 Volts

# SOD-323



DIMENSIONS							
DIM	INCHES		MM		NOTE		
DIIVI	MIN	MAX	MIN	MAX	NOTE		
Α	0.090	0.107	2.30	2.70			
В	0.063	0.071	1.60	1.80			
С	0.045	0.053	1.15	1.35			
D	0.031	0.045	0.80	1.15			
E	0.010	0.016	0.25	0.40			
G	0.004	0.018	0.10	0.45			
Н	0.004	0.010	0.10	0.25			
J		0.006		0.15			

#### Suggested Solder Pad Layout





#### **Curve Characteristics**

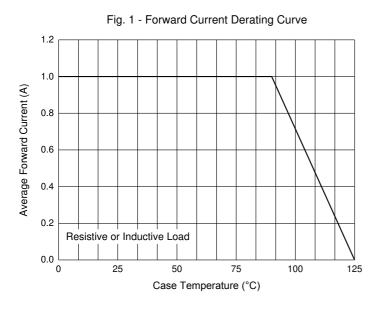
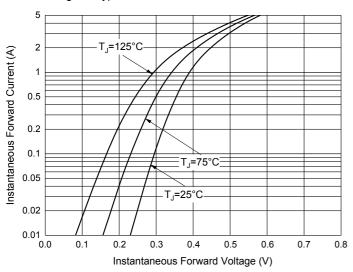


Fig. 3 - Typical Instantaneous Forward Characteristics



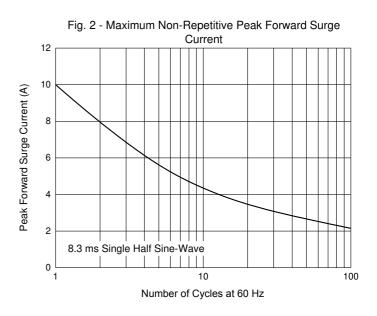
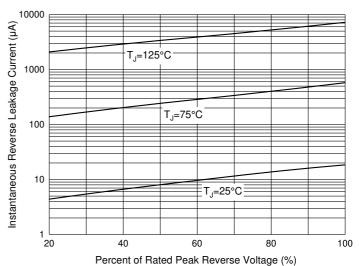


Fig. 4 - Typical Reverse Leakage Characteristics





### **Ordering Information**

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

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