



FUKUCOM COMPANY LTD.

福靈有限公司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.
TEL: 852-2790 0314 FAX: 852-2790 0206

1N5819W

1.0A SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features:

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "SR"
Simplified outline SOD-123 and symbol

Mechanical Data:

Case: SOD-123, Plastic

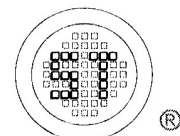
Terminals: Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.01 grams (approx.)

Absolute Maximum Ratings (T_a = 25°C)

	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage at I _R =1.0mA	V _{RWM}	40	V
DC Blocking Voltage	V _R	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
Average Rectified Output Current at T _L =90°C	I _O	1.0	A
Power Dissipation	P _{tot}	450	mW
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25	A
Typical Thermal Resistance Junction to Ambient	R _{θJA}	222	°C/W
Operating Temperature Range	T _J	-65 to +125	°C
Storage Temperature Range	T _S	-65 to +150	°C



SEMTECH

Dated : 15/09/2004



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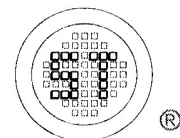
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Characteristics at $T_{amb} = 25^{\circ}C$

		Symbol	Min.	Typ.	Max.	Unit
Forward Voltage (Note 1)	at $I_F = 0.1A$	V_{FM}	-	-	0.32	V
	at $I_F = 1.0A$	V_{FM}	-	-	0.45	V
	at $I_F = 3.0A$	V_{FM}	-	-	0.75	V
Reverse Breakdown Voltage	at $I_R = 1.0mA$	$V_{(BR)R}$	40	-	-	V
Reverse Leakage Current (Note 1)	at $V_R = 40V$	I_{RM}	-	-	1	mA
	at $V_R = 40V, T_A = 100^{\circ}C$		-	-	10	mA
	at $V_R = 4V$		-	10	50	μA
	at $V_R = 4V, T_A = 100^{\circ}C$		-	1	2	mA
	at $V_R = 6V$		-	15	75	μA
	at $V_R = 6V, T_A = 100^{\circ}C$		-	1.5	3	mA
Typical Junction Capacitance at $V_R = 4V, f = 1MHz$		C_J	-	110	-	pF

Notes:

1. Pulse Test: Pulse width $\leq 200 \mu s$, Duty Cycle $\leq 2\%$.



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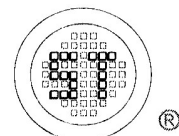
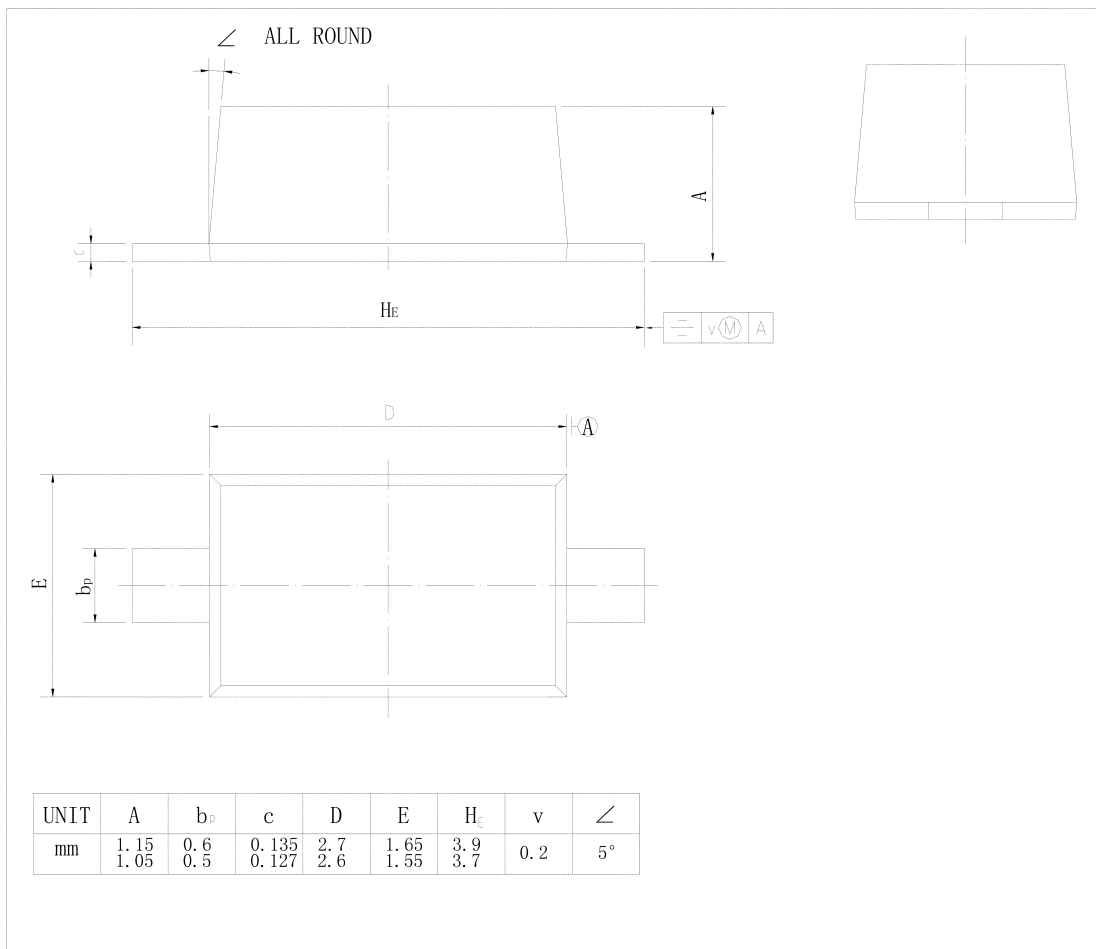
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



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