



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

1N5817W

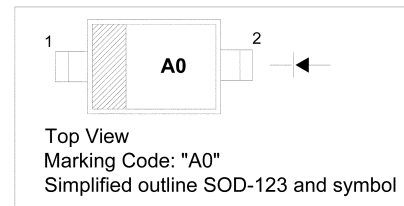
1.0A SURFACE MOUNT SCHOTTKY BARRIER DIODE

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



Mechanical Data:

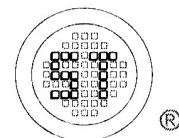
Case: SOD-123, Plastic

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

Polarity: Cathode Band

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
Working Peak Reverse Voltage at $I_R=1.0\text{mA}$	V_{RWM}	20	V
DC Blocking Voltage	V_R	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified Output Current at $T_L=90^\circ\text{C}$	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	$R_{\theta JA}$	222	$^\circ\text{C/W}$
Operating Temperature Range	T_j	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +150	$^\circ\text{C}$



SEMTECH

Dated : 24/11/2004



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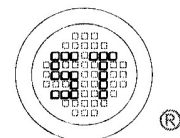
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Characteristics at $T_{amb} = 25^{\circ}C$

		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 $I_R = 1.0mA$	$V_{(BR)R}$	20	-	-	V
Reverse Leakage Current (Note 1)	at $V_R = 20V$	I_{RM}	-	-	1	mA
	at $V_R = 20V, T_A = 100^{\circ}C$		-	-	10	mA
	at $V_R = 2V$		-	10	50	μA
	at $V_R = 2V, T_A = 100^{\circ}C$		-	1	2	mA
	at $V_R = 3V$		-	15	75	μA
	at $V_R = 3V, T_A = 100^{\circ}C$		-	1.5	3	mA
Typical Junction Capacitance at $V_R = 2V, f = 1MHz$		C_J	-	110	-	pF

Notes:

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



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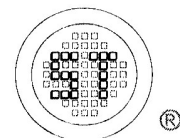
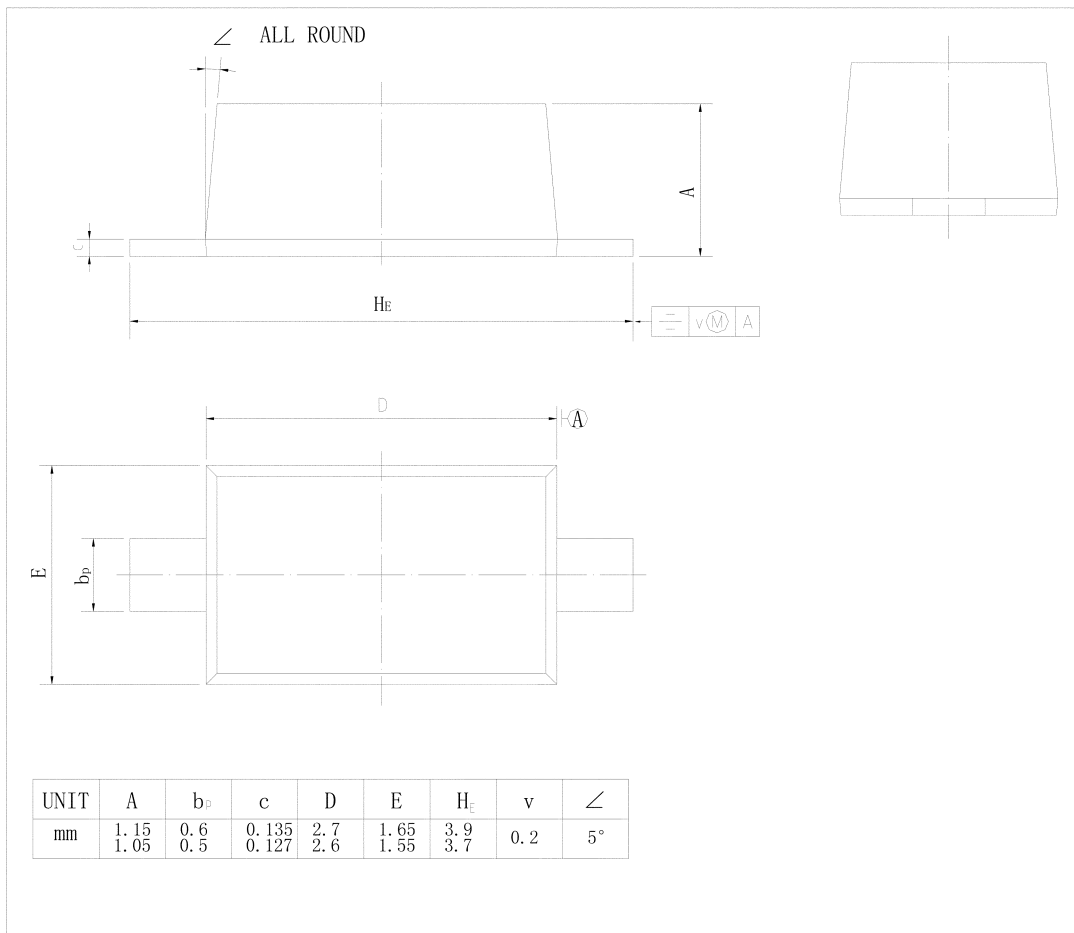
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



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