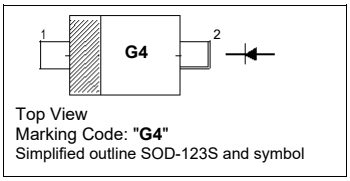
SS1040W SURFACE MOUNT SCHOTTKY BARRIER DIODE

FEATURES

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**G4**"
Simplified outline SOD-123S and symbol

Absolute Maximum Ratings (T_a = 25°C)

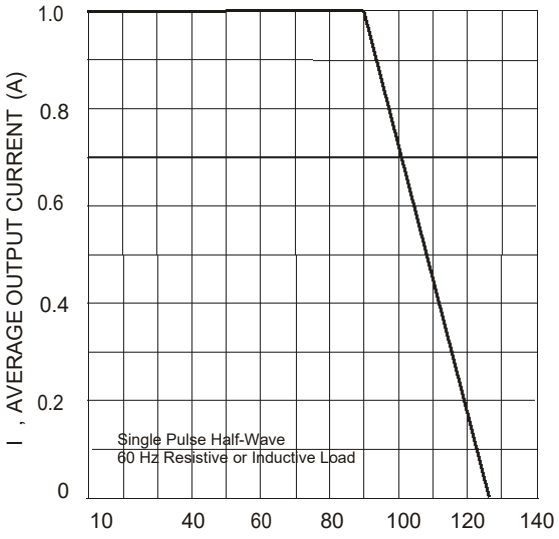
Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
Forward Continuous Current (Note 1)	I_F	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25	A
Power Dissipation (Note 1)	P_d	450	mW
Typical Thermal Resistance, Junction to Ambi nt Air (Note 1)	R_{JA}	222	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125	°C

Characteristics (T_a = 25°C)

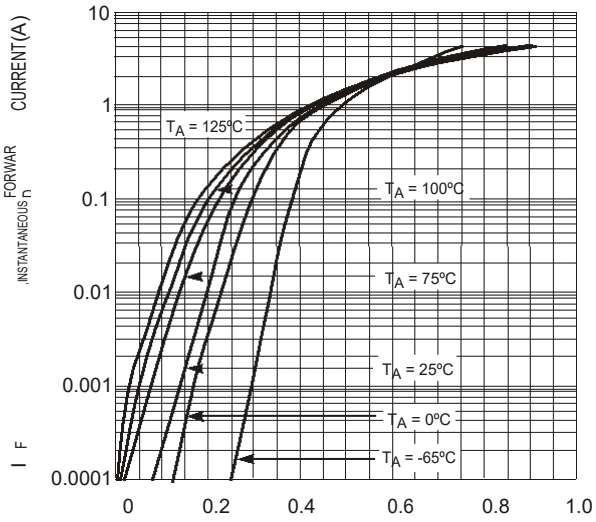
Characteristic	Symbol	Value	Unit
Forward Voltage Drop @I_F = 1.0A	V_{FM}	0.55	V
Peak Reverse Leakage Current @ DC Blocking Voltage	I_{RM}	500	μA
Typical Junction Capacitance (V_R = 4V DC, f = 1MHz)	C_j	50	pF

Note: 1. Valid provided that terminals are kept at ambient temperature.

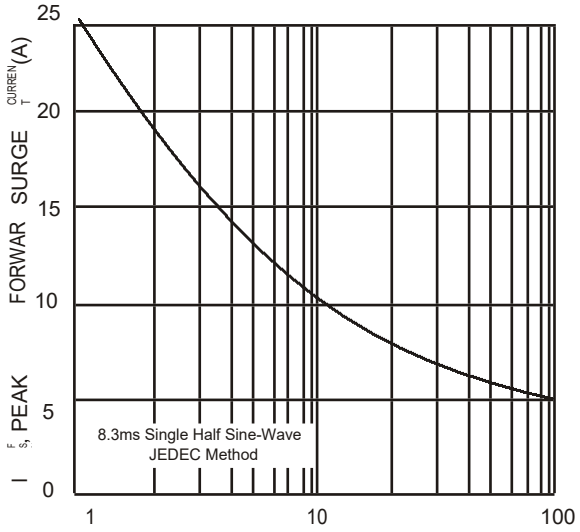
Typical Characteristics



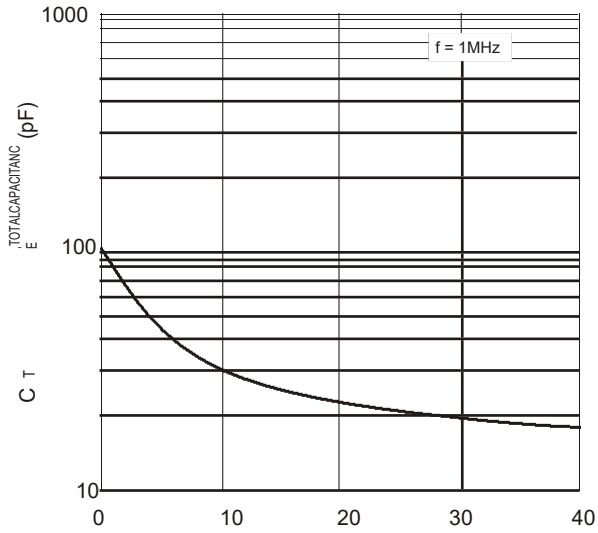
T_T, TERMINAL TEMPERATURE (ºC)
Fig. 1 Forward Current Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



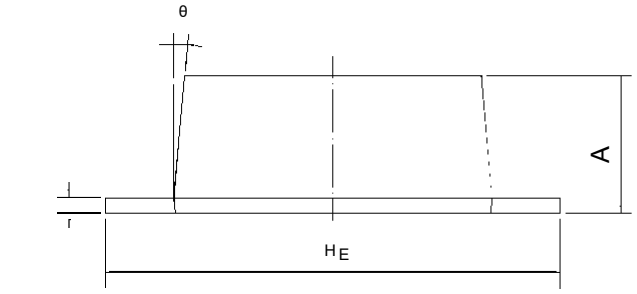
NUMBER OF CYCLES AT 60 Hz
Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

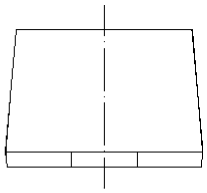


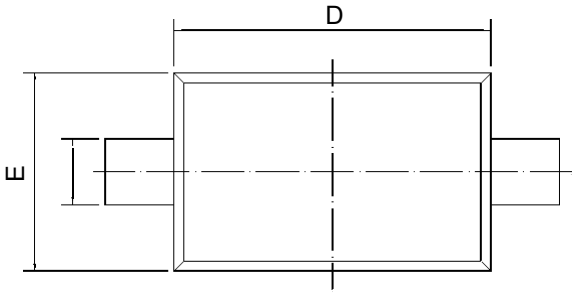
V_R, REVERSE VOLTAGE (V)
Fig. 4 Typical Total Capacitance

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123S**







UNIT	A	b_p	c	D	E	H_E	θ
mm	0.975 0.875	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	5°