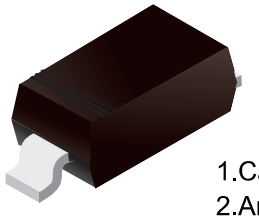
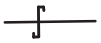
■ Schottky Barrier Rectifiers



1.Cathode
2.Anode

■ Simplified outline(SOD-123)



■ Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

■ Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter		Symbols	B0520W	B0530W	B0540W	Units
Peak Repetitive Reverse Voltage		V_{RRM}	20	30	40	V
RMS reverse voltage reverse voltage (DC)		V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage		V_{DC}	20	30	40	V
Maximum Average Forward Current at Ta=25℃		I_O	0.5			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	25			A
Maximum Instantaneous Forward Voltage	I_F=0.1A I_F=0.5A I_F=1A	V_F	0.330 0.390 –	0.375 0.430 –	– 0.510 0.620	V
Reverse current	V_R=10V V_R=15V V_R=20V V_R=30V V_R=40V	I_R	75 – 250 – –	– 20 – 130 –	– – 10 – 20	uA
Thermal Resistance, Junction to Ambient Air		$R_{\theta JA}$	200			°C/W
Junction temperature		T_j	-55 ~ +125			°C
Storage temperature		T_{stg}	-55 ~ +150			°C

Fig.1 Forward Current Derating Curve

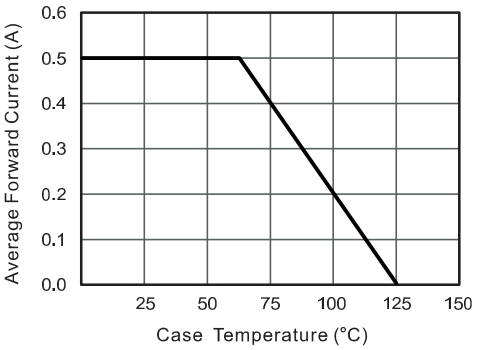


Fig.2 Typical Reverse Characteristics

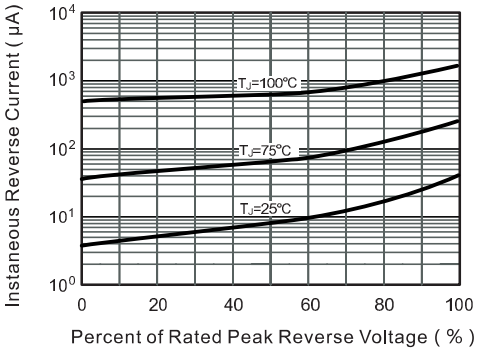


Fig.3 TYPICAL FORWARD VOLTAGE

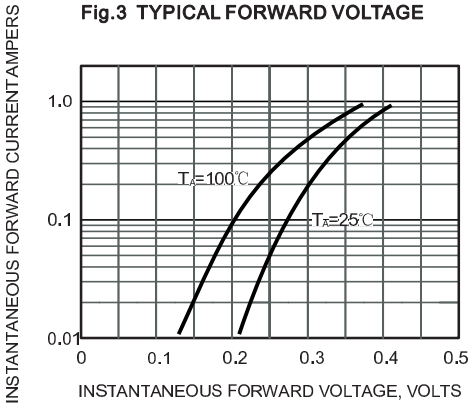


Fig.4 Typical Junction Capacitance

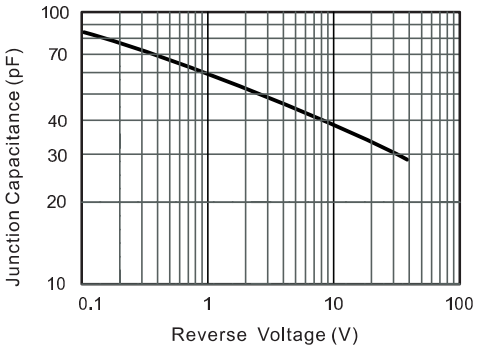


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

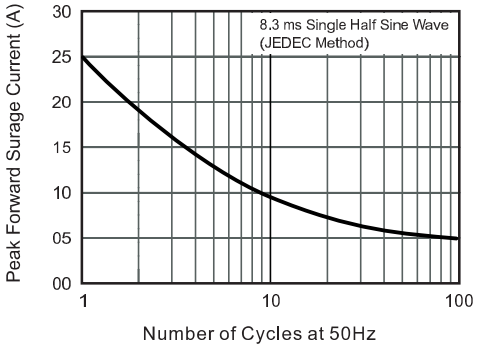
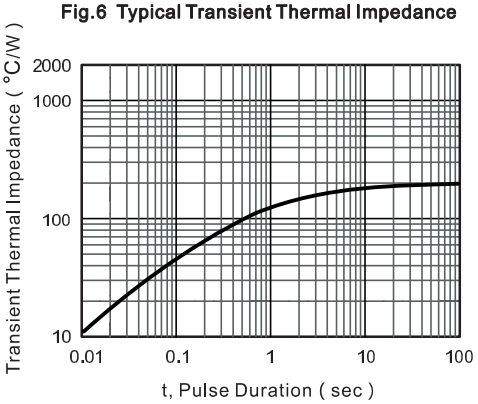
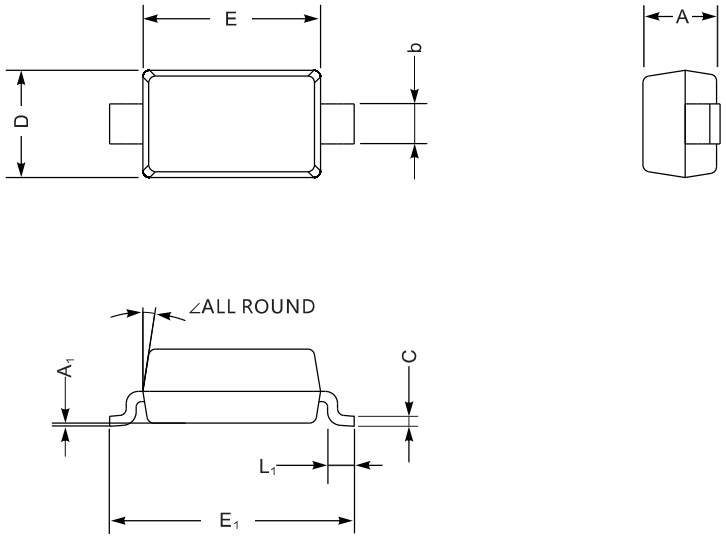


Fig.6 Typical Transient Thermal Impedance



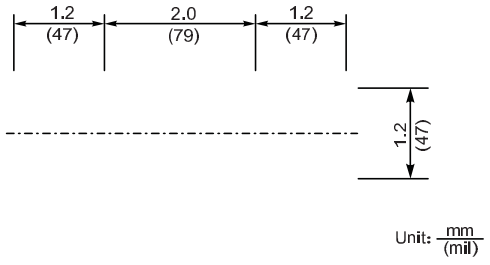
Package Outline SOD-123

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	E_1	L_1	b	A_1	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123	Tape/Reel,7"reel	3000	EIA-481-1