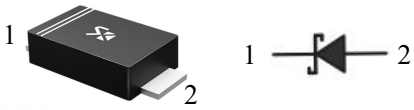
SK24WAL

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V Forward Current - 2.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-123FL and symbol

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Marking:SL24

Maximum Ratings and Electrical characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %)

Parameter		Symbol	Limit	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	40	V
Maximum RMS voltage		V_{RMS}	28	V
Maximum DC Blocking Voltage		V_{DC}	40	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	2	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	50	A
Max Instantaneous Forward Voltage at 2 A		V_F	0.50	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T_A=25℃	I_R	0.5	mA
	T_A=100℃		10	mA
Typical Junction Capacitance(1)		C_J	290	pF
Typical Thermal Resistance(2)		$R_{\theta JA}$	70	℃/W
Operating Junction Temperature Range		T_J	-55~+125	℃
Storage Temperature Range		T_{STG}	-55~+150	℃

(1) Measured at 1MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0 x 2.0" (5 x 5 cm) copper pad areas.

Typical Characteristics

Fig.1 Forward Current Derating Curve

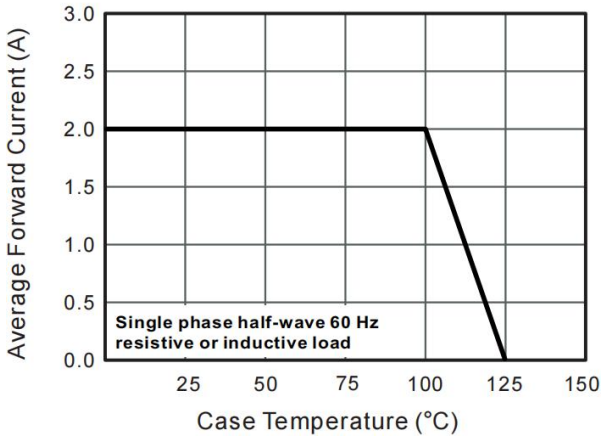


Fig.2 Typical Reverse Characteristics

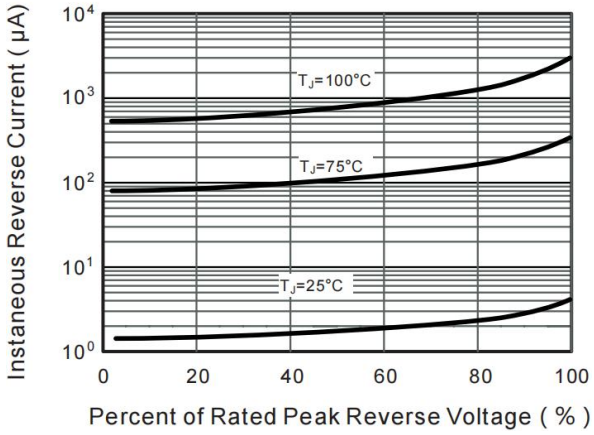


Fig.3 Typical Forward Characteristic

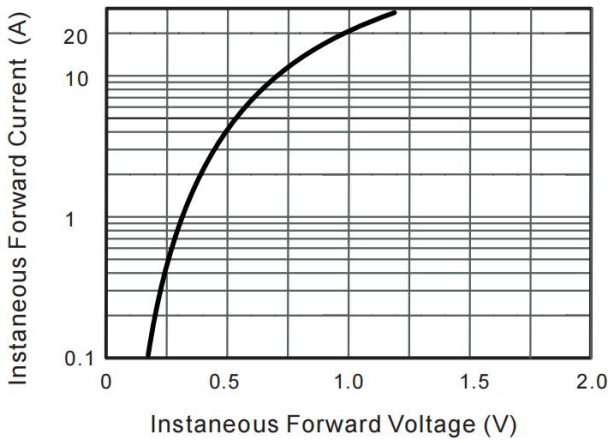


Fig.4 Typical Junction Capacitance

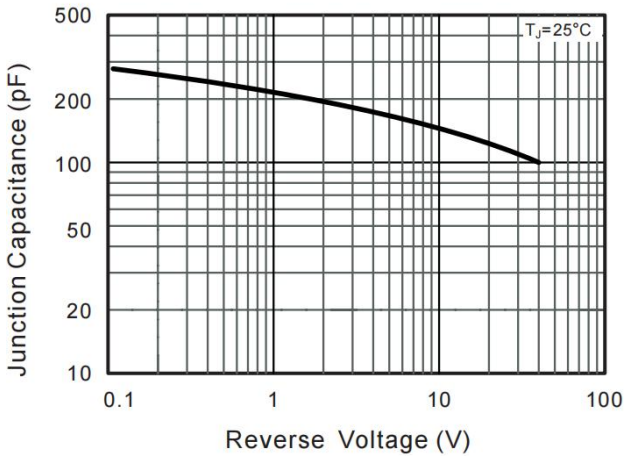


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

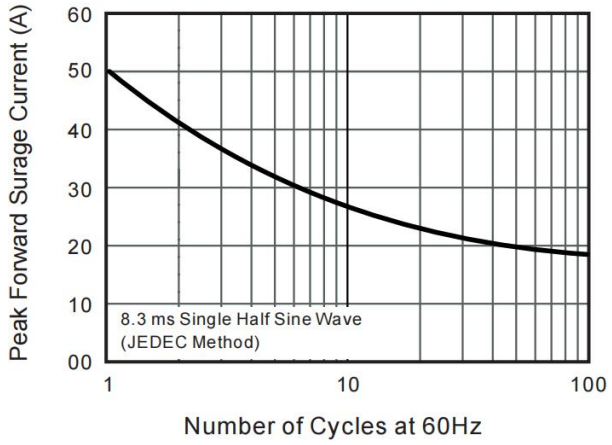
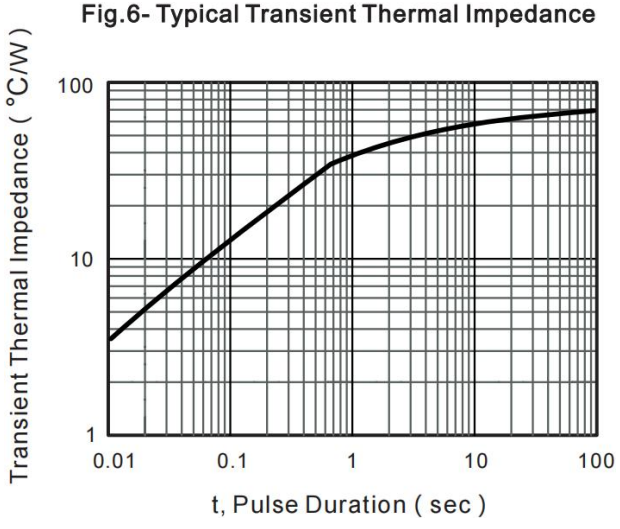


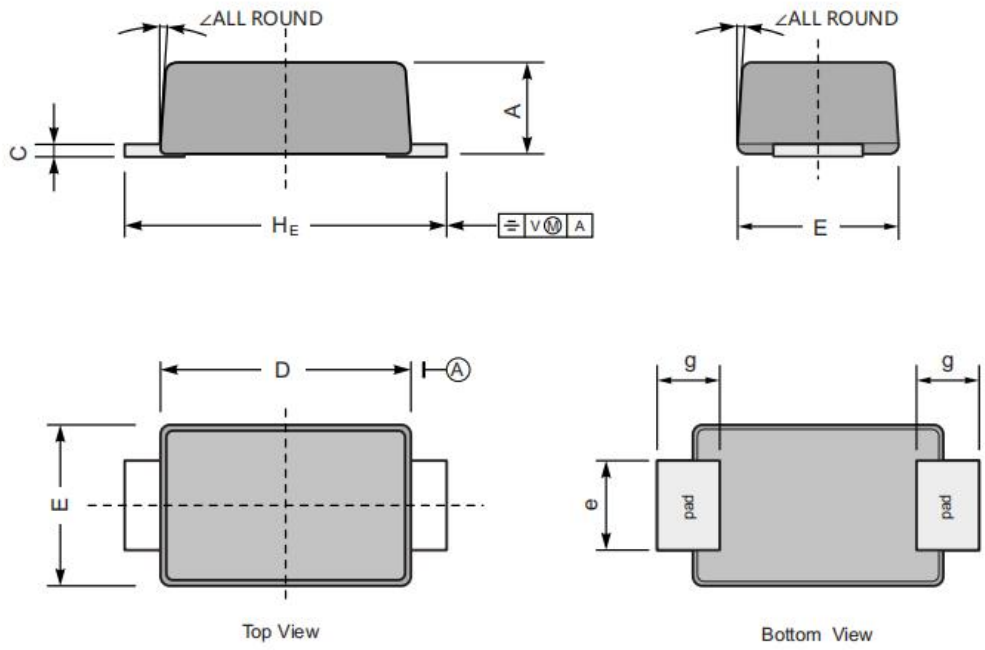
Fig.6- Typical Transient Thermal Impedance



Package Information

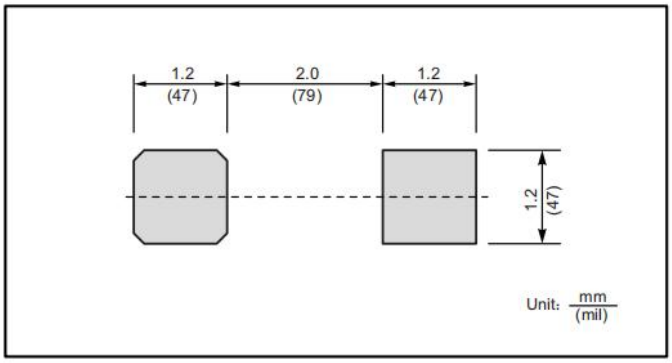
SOD-123FL

Dimensions in mm



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size



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