K110

Surface Mount Schottky Rectifier

Forward Current - 1.0 A

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

MECHANICAL DATA

- Case: SOD-123 FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15 mg 0.00048oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Marking Code : K110

Simplified outline SOD-123 FL and symbol

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	K110	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30	A
Max Instantaneous Forward Voltage at 1 A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Reverse Voltage T_a = 25°C T_a = 100°C	I_R	0.2 5	mA
Typical Junction Capacitance 1)	C_j	80	pF
Typical Thermal Resistance 2)	$R_{\theta JA}$	115	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.
2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

Characteristic Curves (T =25 ℃ unless otherwise noted)

Fig. 1 Forward Current Derating Curve

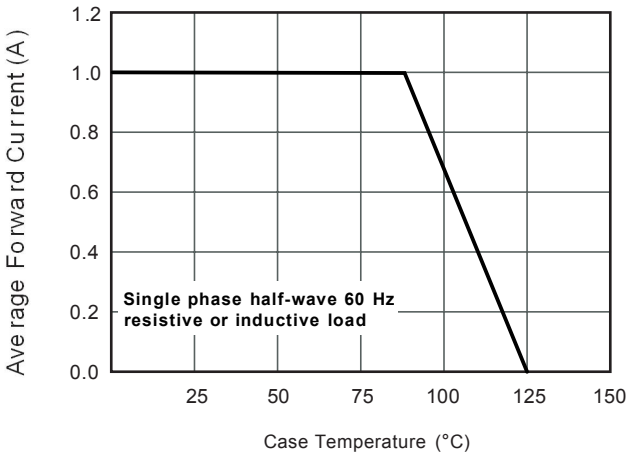


Fig.2 Typical Reverse Characteristics

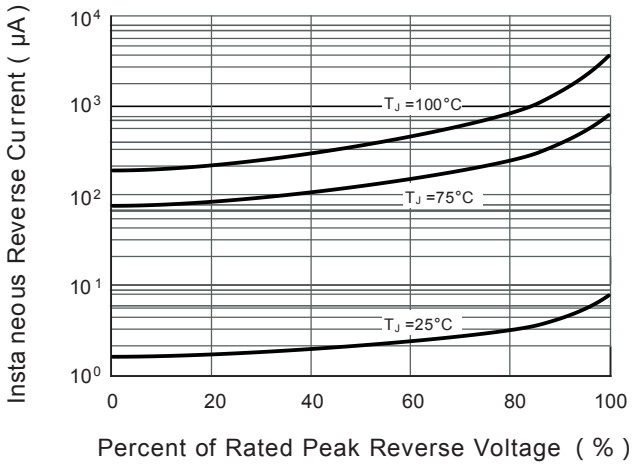


Fig.3 Typical Forward Characteristic

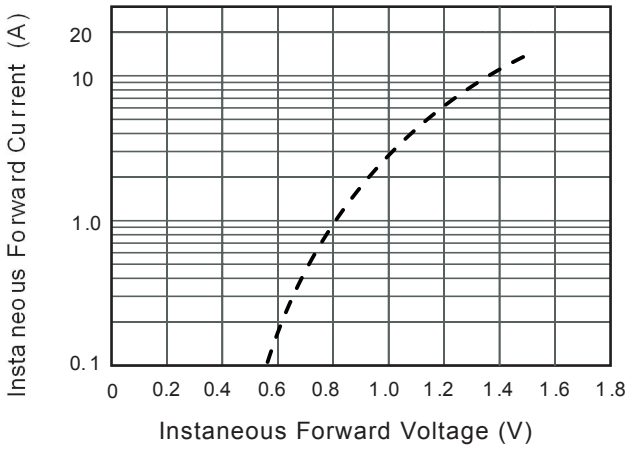


Fig.4 Typical Junction Capacitance

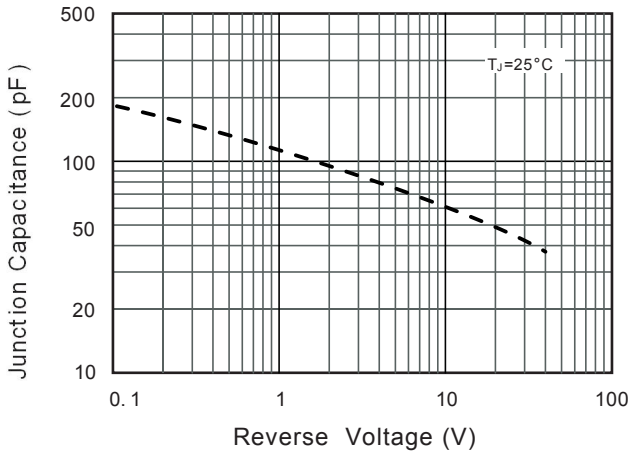


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

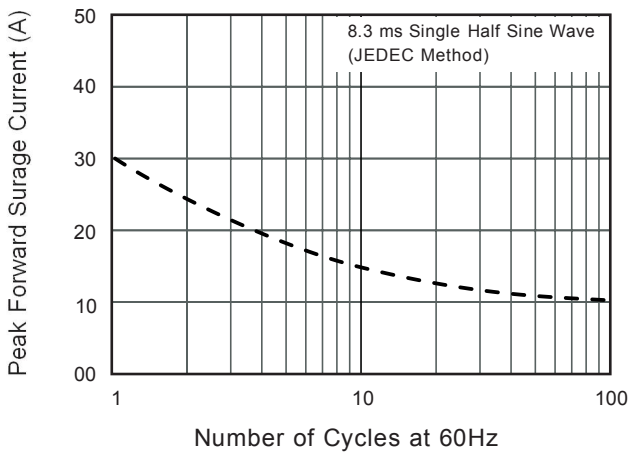
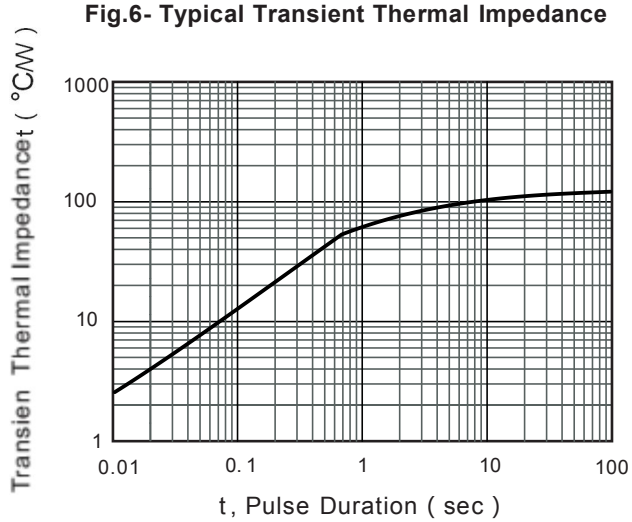
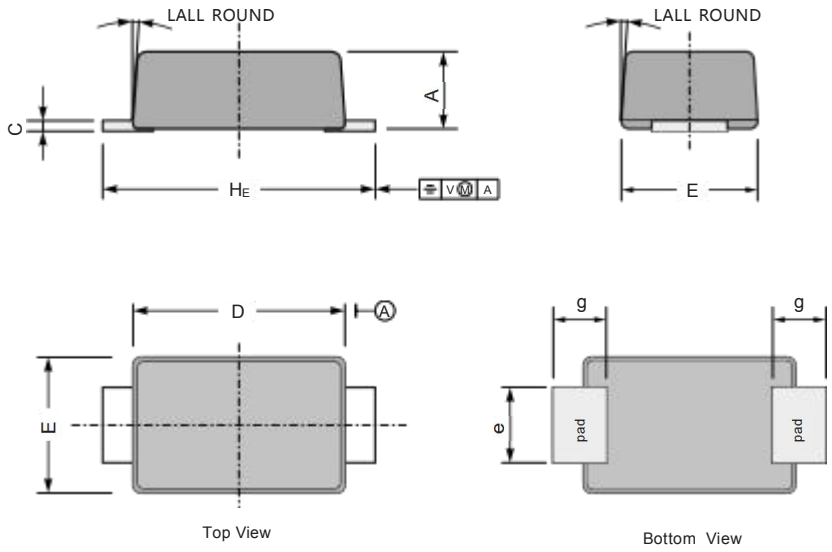


Fig.6- Typical Transient Thermal Impedance



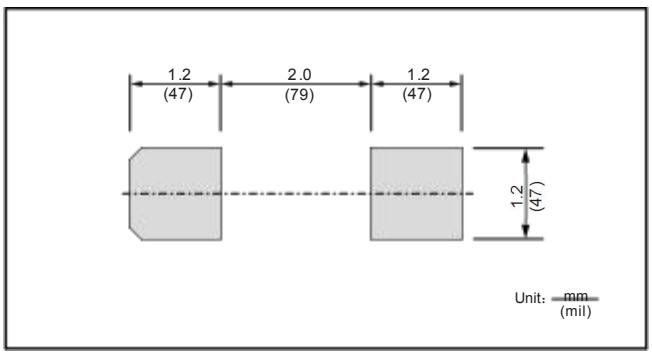
PACKAGE OUTLINE

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



UNIT		A	C	D	E	e	g	H_E	L
mm	max	1.30	0.20	2.9	1.95	1.1	0.9	3.8	7°
	min	0.9	0.12	2.5	1.60	0.7	0.7	3.5	
mil	max	51.2	7.9	114	77	43	35	150	
	min	35	4.7	98	63	31	27.6	138	

The recommended mounting pad size



Marking

Type number	Marking code
K110	K110