

Surface Mount Schottky Barrier Rectifier  
 Reverse Voltage - 20 to 200 V  
 Forward Current - 2.0A



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

#### Absolute Maximum Ratings and Electrical characteristics

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

Parameter	Symbols	K22	K24	K26	K28	K210	K212	K215	K220	Units					
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V					
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V					
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V					
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0							A						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	60							A						
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55		0.70		0.85		0.95		V					
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Reverse Voltage $T_a = 100^\circ C$	$I_R$	0.5 5			0.3 3			mA							
Typical Junction Capacitance <sup>(1)</sup>	$C_J$	220		80											
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	85							°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 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

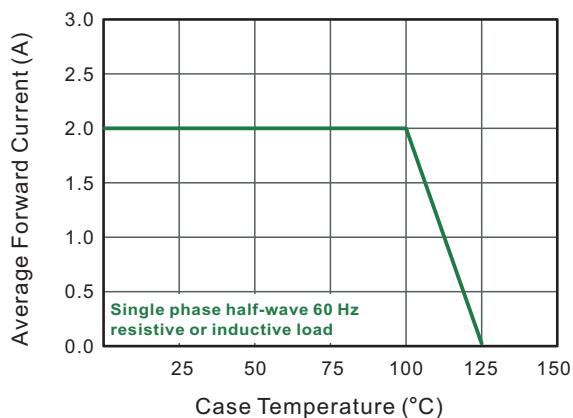


Fig.2 Typical Reverse Characteristics

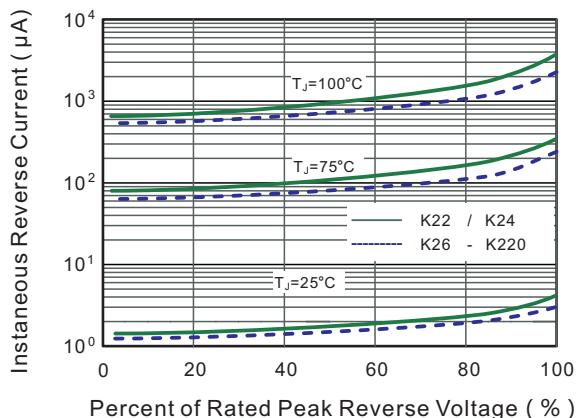


Fig.3 Typical Forward Characteristic

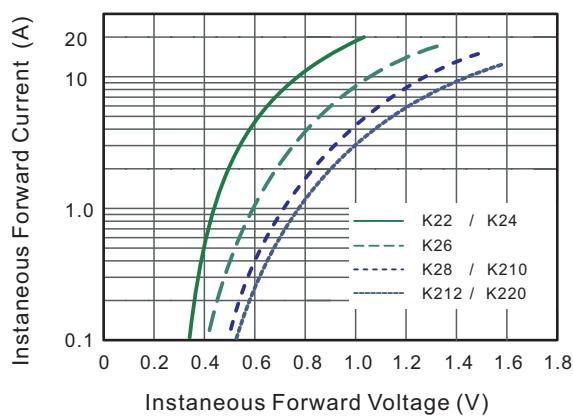


Fig.4 Typical Junction Capacitance

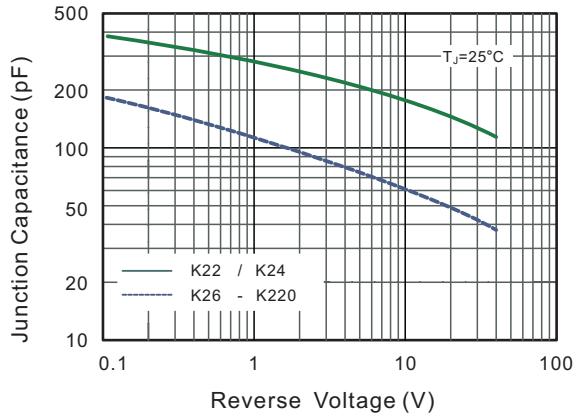


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

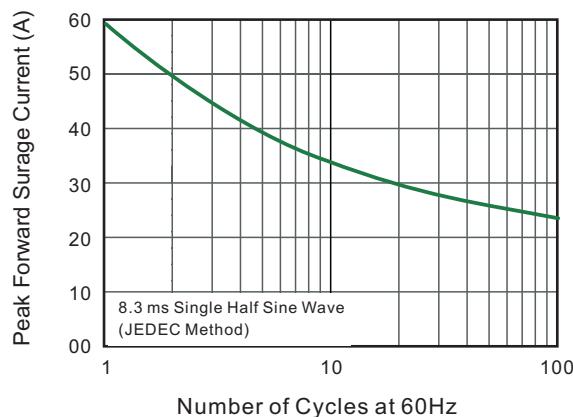
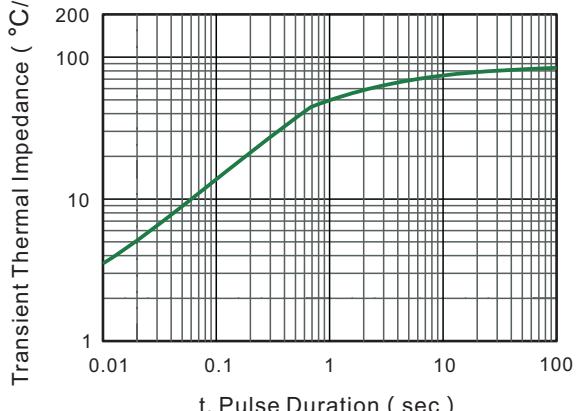


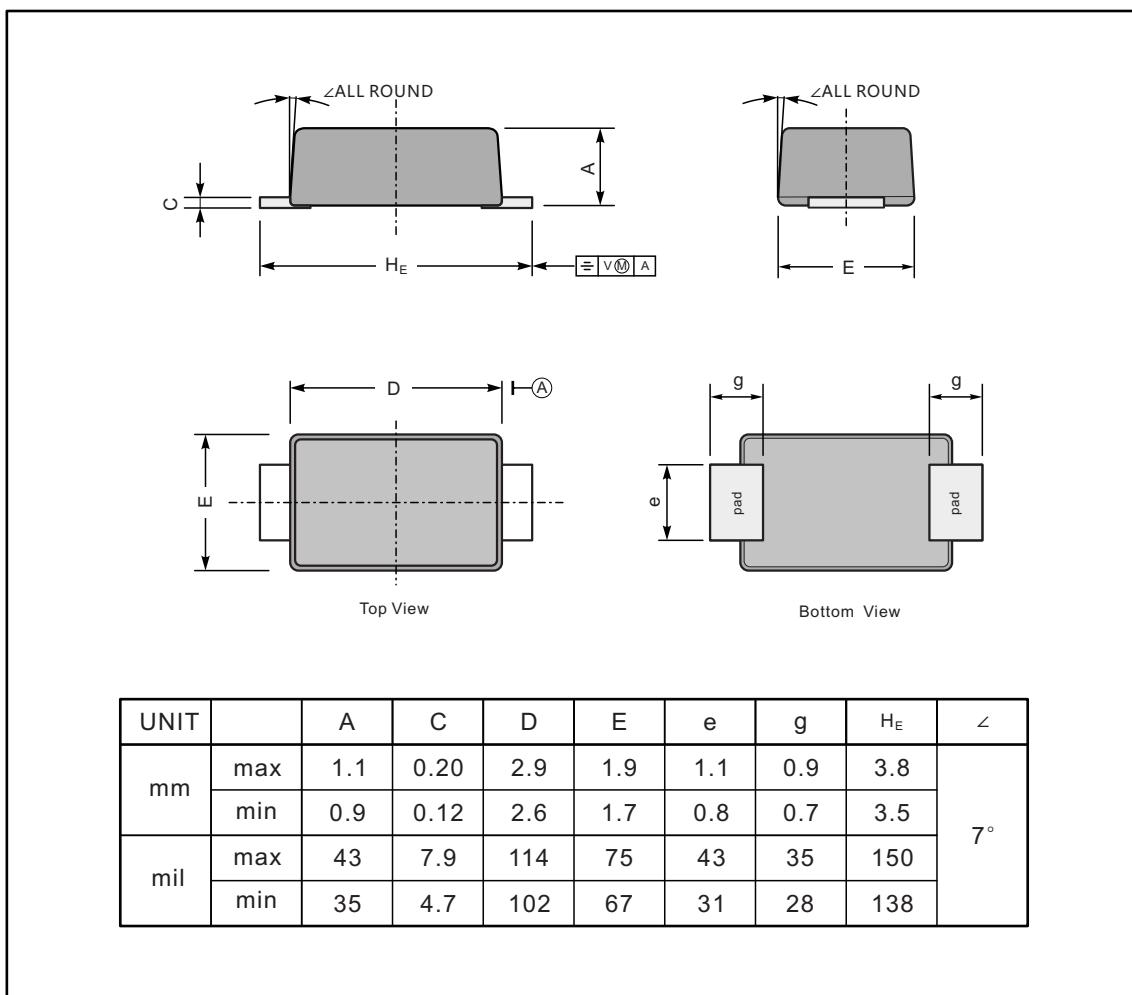
Fig.6-Typical Transient Thermal Impedance



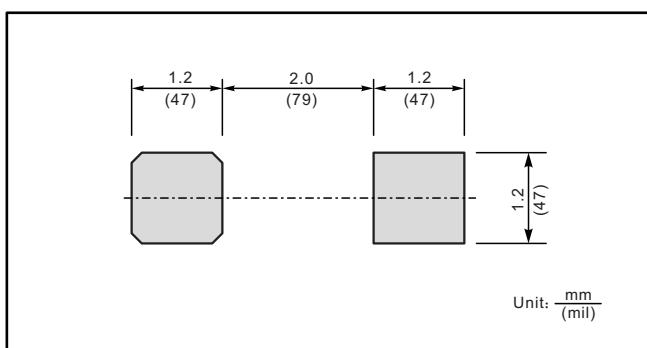
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



### The recommended mounting pad size



### Marking

Type number	Marking code
K22	K22
K24	K24
K26	K26
K28	K28
K210	K210
K212	K212
K215	K215
K220	K220