



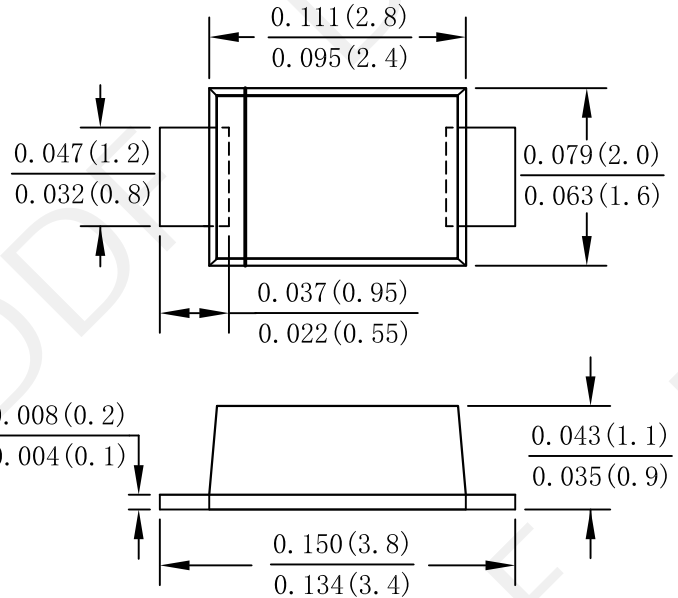
K22 THRU K220

Single Phase 2.0AMP Surface Mount Schottky Barrier Rectifier

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Case: SOD-123FL



Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	K22	K23	K24	K25	K26	K28	K210	K215	K220	UNITS	
Peak Repetitive Reverse Voltage	V_{RRM}											
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	100	150	200	V	
DC Blocking Voltage	V_{DC}											
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Average Rectified Output Current @ $T_L=90^\circ\text{C}$	$I_{F(AV)}$	2.0									A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50									A	
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10.375									A^2s	
Forward Voltage per element @ $I_F=2.0\text{A}$	V_{FM}	0.55			0.7		0.85		0.92		V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	0.1					0.05					mA
		10					5					
Typical Junction Capacitance (Note 1)	C_J	80					40					pF
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	110 15 20										$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55to+150									$^\circ\text{C}$	
Operating and Storage Temperature Range	T_{STG}	-55to+150									$^\circ\text{C}$	

Note:1. Measured at 1MHZ and applied reverse voltage of 4.0V D.C.



Fig. 1 Typical Forward Current Derating Curve

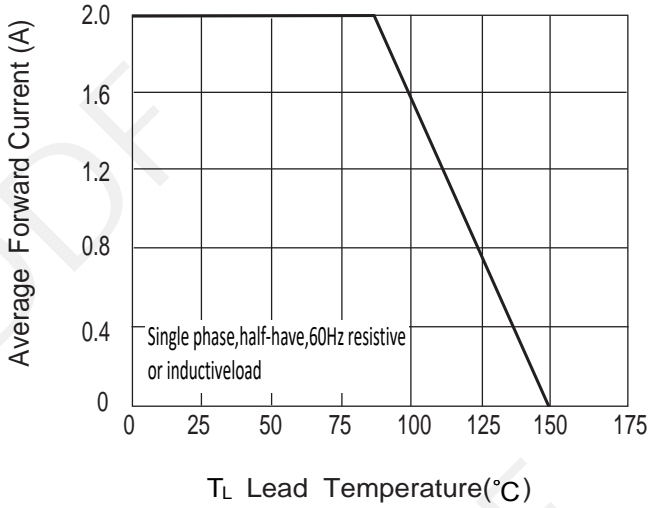


Fig. 2 Typical Instantaneous Forward Characteristics

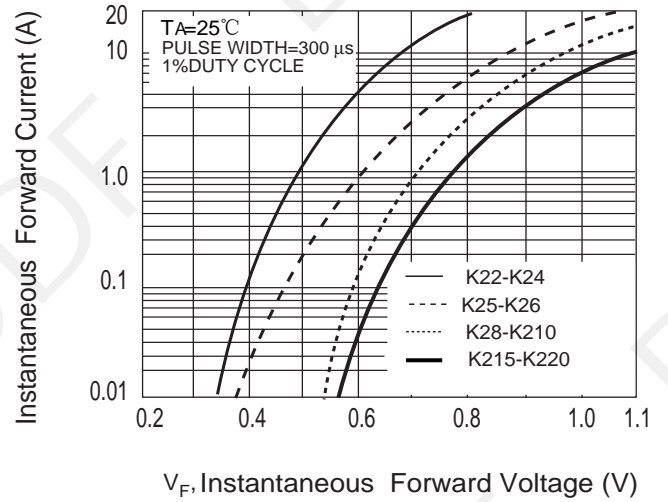


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

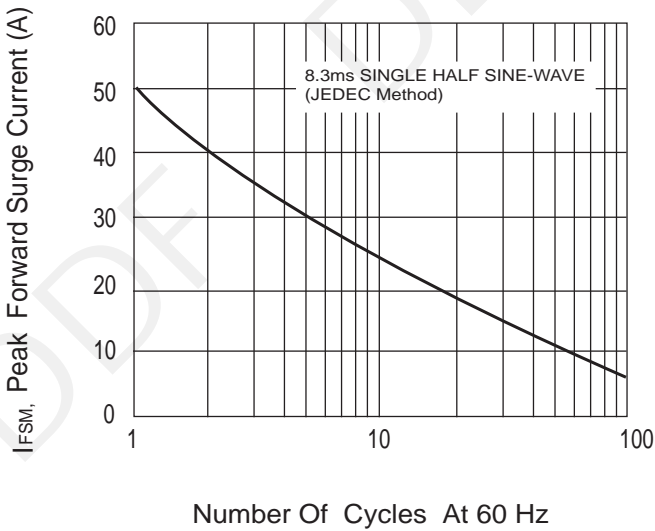


Fig.4 Typical Reverse Characteristics

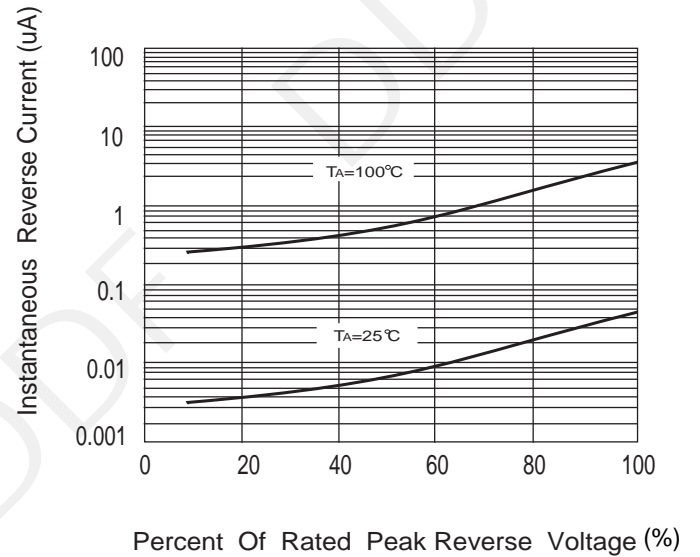


Fig.5 Typical Capacitance

