

Single Phase 2.0AMP Surface Mount Schottky Barrier Rectifier

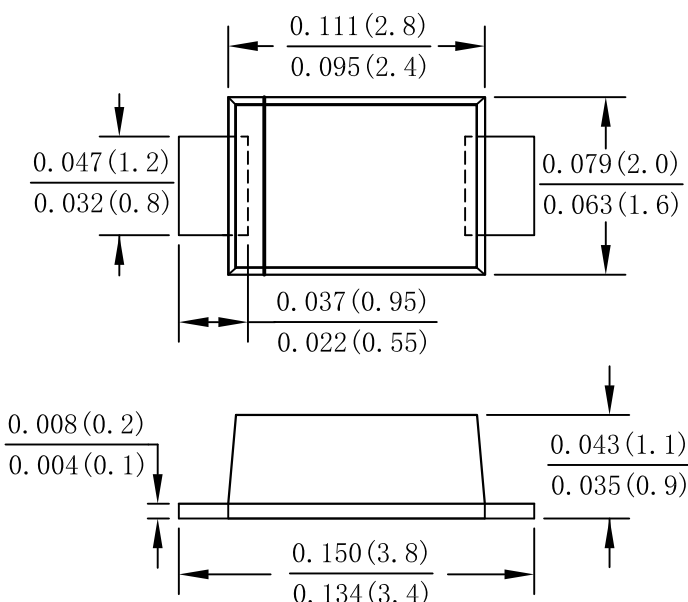
Features

- 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

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

Case: SOD-123FL



Dimensions in inches and (millimeters)

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	DS K22	DS K23	DS K24	DS K25	DS K26	DS K28	DS K210	DS K215	DS K220	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
	V _{RWM}										
	V _{DC}										
RMS Reverse Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current @T _L =90℃	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 ² t Rating for Fusing (t < 8.3ms)	I ² t	10.375									A ² s
Forward Voltage per element @IF=2.0A	V _{FM}	0.55			0.7			0.85		0.92	V
Peak Reverse Current @TA =25℃ At Rated DC Blocking Voltage @TA =100℃	I _R	0.1						0.05			mA
		10						5			
Typical Junction Capacitance (Note 1)	C _J	80						40			pF
Typical thermal resistance	R _{θJA}	110									℃/W
	R _{θJC}	15									
	R _{θJL}	20									
Operating junction temperature range	T _J	-55to+150									℃
Operating and Storage Temperature Range	T _{STG}	-55to+150									℃

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

Single Phase 2.0AMP Surface Mount Schottky Barrier Rectifier

Fig. 1 Typical Forward Current Derating Curve

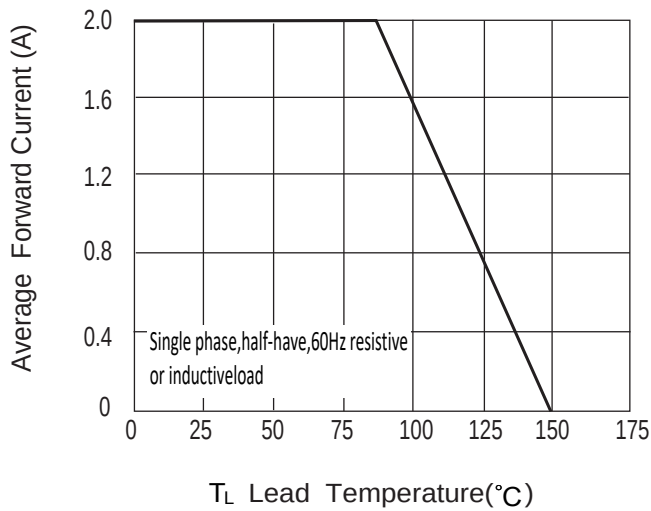


Fig. 2 Typical Instantaneous Forward Characteristics

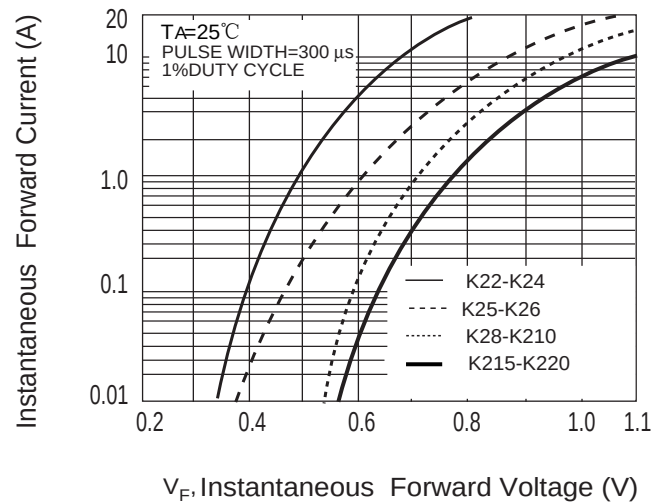


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

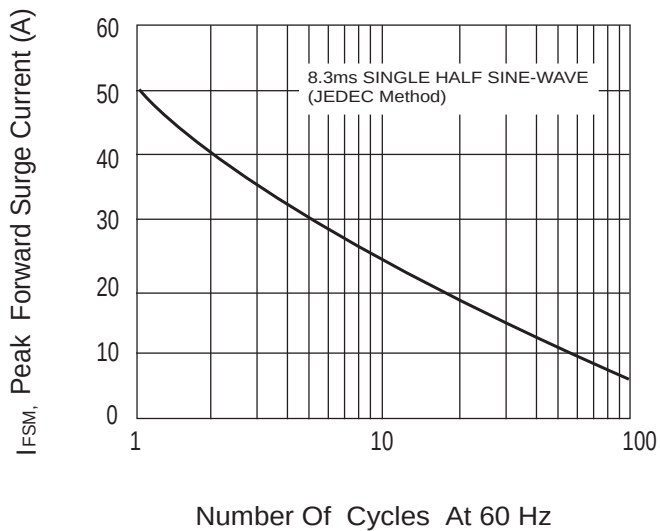


Fig.4 Typical Reverse Characteristics

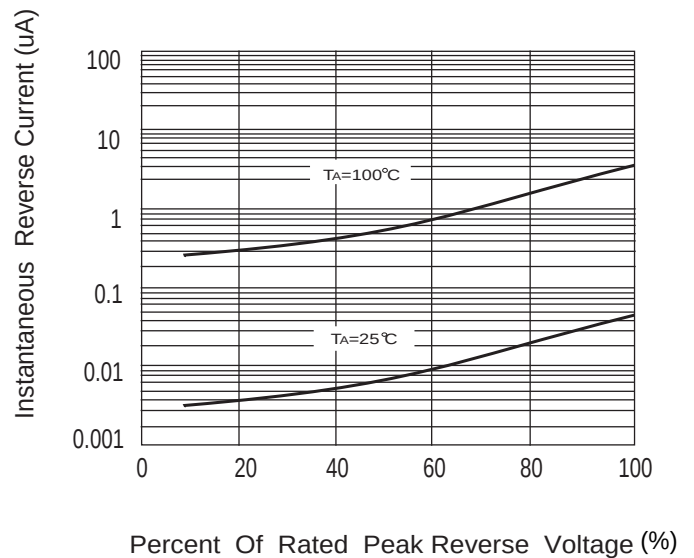


Fig.5 Typical Capacitance

