

## SCHOTTKY BARRIER RECTIFIERS

**REVERSE VOLTAGE: 20 to 200 VOLTS**

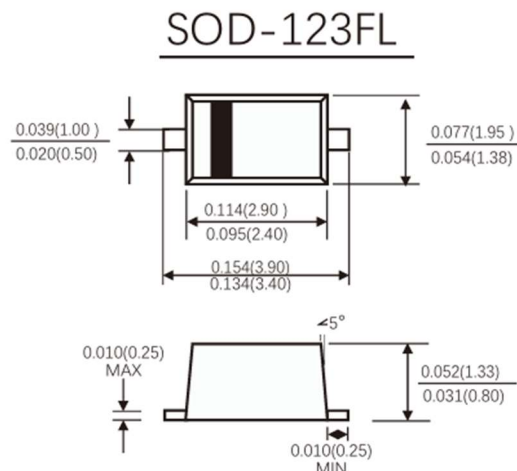
**FORWARD CURRENT: 3.0 AMPERE**

### Features

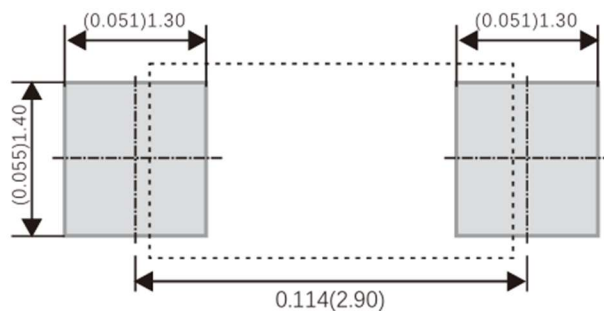
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High temperature soldering guaranteed:  
260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

### Mechanical Data

- Case: SOD-123FL molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Tape Reel: 3000pcs



### Suggested PAD Layout



Dimensions in inches and (millimeters)

### 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 current by 20%.

Parameters / Marking Code	Symbols	K32	K33	K34	K36	K3A	K3B	K3D	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	42	70	105	140	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1)	$I(AV)$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80.0							Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)	$V_F$	0.55		0.70		0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$I_R$	100			20				$\mu A$
		5			-				$m A$
		-			3				
Typical junction capacitance(Note 2)	$C_J$	250			160				pF
Typical thermal resistance	$R_{\theta JA}$	80							°C/W
Operating junction temperature range	$T_J$	-55 to+150							°C
Storage temperature range	$T_{STG}$	-55 to+150							°C

#### NOTES:

1. Pulse test: 300 $\mu s$  pulse width, 1% duty cycle
2. Measured at 1MHz and reverse voltage of 4.0volts

## RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

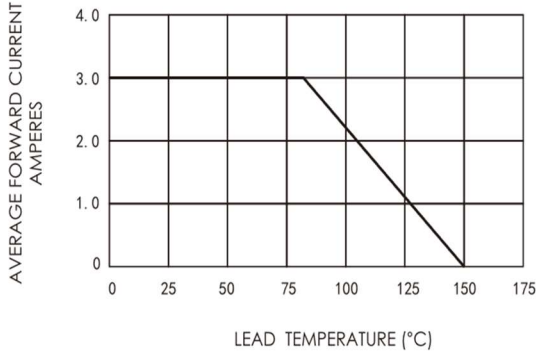


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

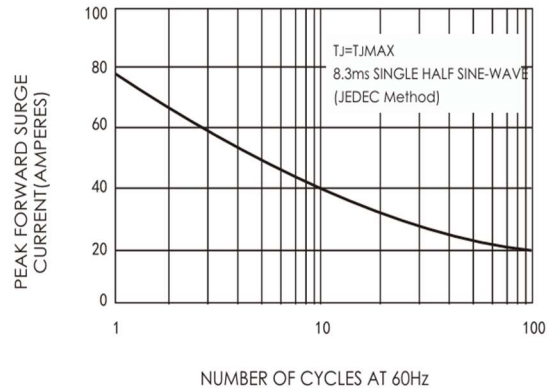


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

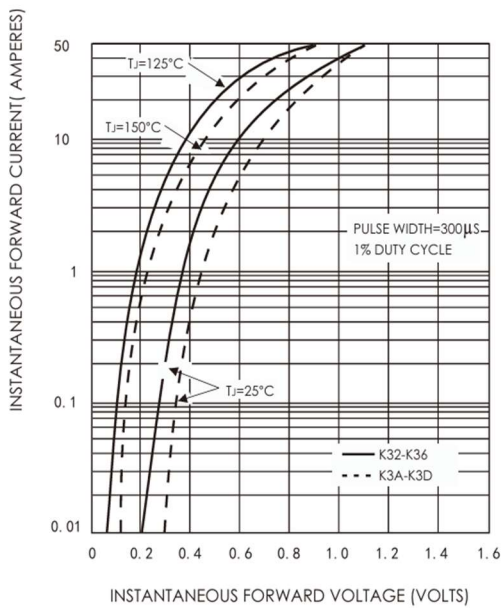


FIG.4-TYPICAL REVERSE CHARACTERISTICS

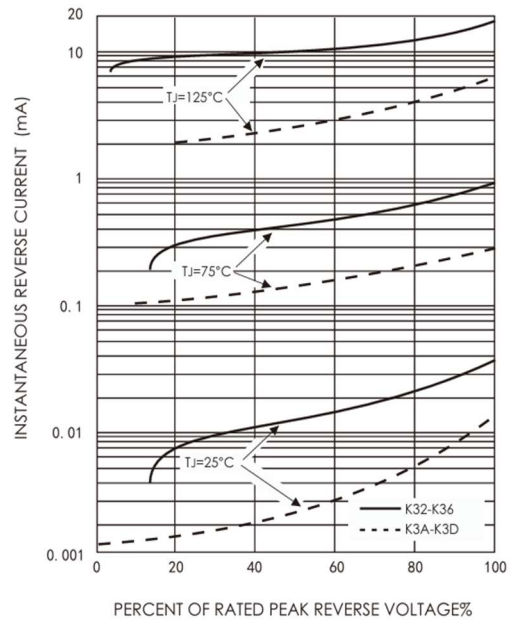


FIG.5-TYPICAL JUNCTION CAPACITANCE

