

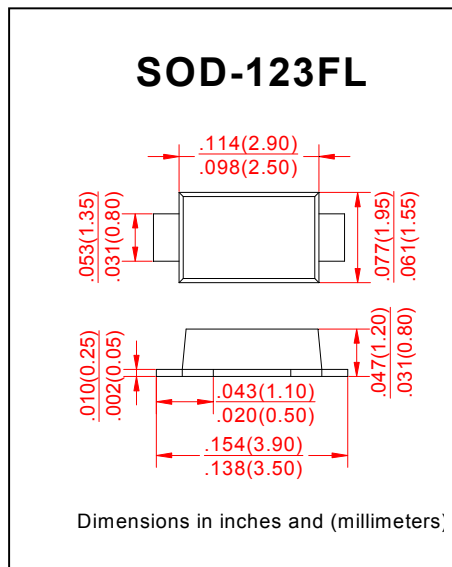


## FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing, and polarity protection applications
- Guarding for over voltage protection

## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end



## 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%.

TYPE NUMBER		SYMBOLS	K32	K33	K34	K35	K136	K38	K39	K310	UNIT
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at T <sub>L</sub> =105℃		I <sub>(AV)</sub>	3.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	80								Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)		V <sub>F</sub>	0.55			0.75		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T <sub>A</sub> = 25℃	I <sub>R</sub>	0.5								mA
	T <sub>A</sub> =100℃		20.0			10.0					
Operating Junction Temperature		T <sub>J</sub>	(-55 to +125)			(-55 to +125)			℃		
Storage Temperature Range		T <sub>STG</sub>	(-55 to +150)								℃

### Notes:

1. Pulse test: 300  $\mu$  s pulse width, 1% duty cycle
2. PCB mounted with 0.2×0.2" (5.0 × 5.0mm) copper pads

FIG.1-TYPICAL FORWARD CURRENT  
DERATING CURVE

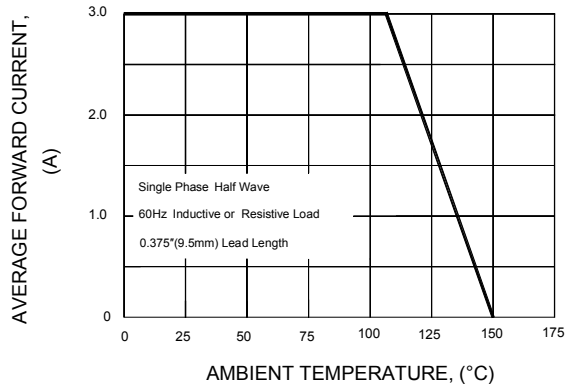


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT

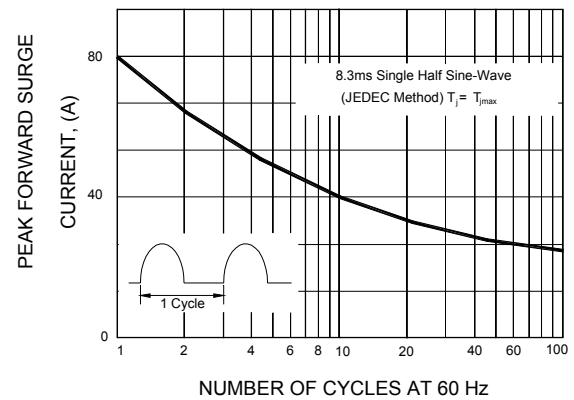


FIG.3-TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

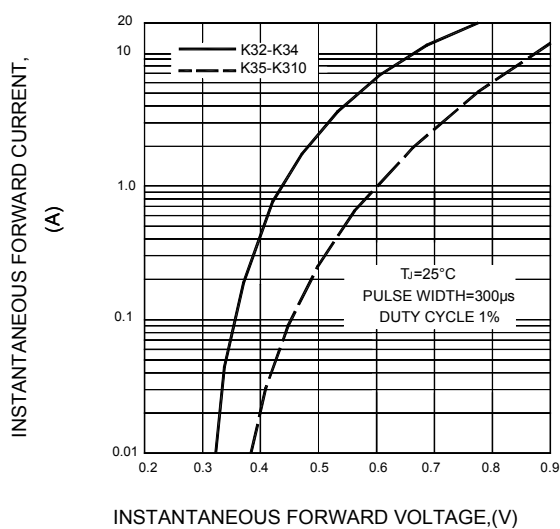


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

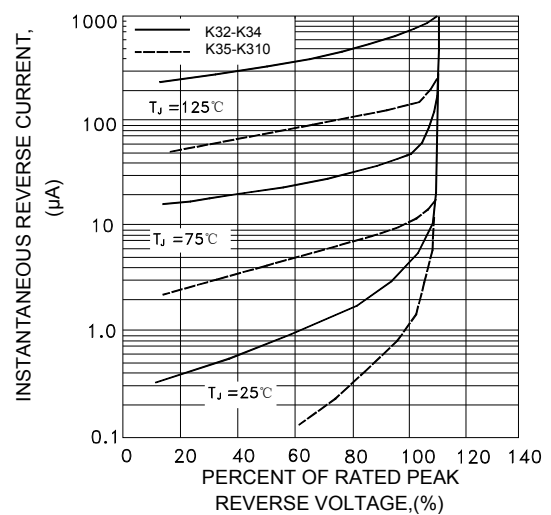


FIG.5-TYPICAL JUNCTION CAPACITANCE

