

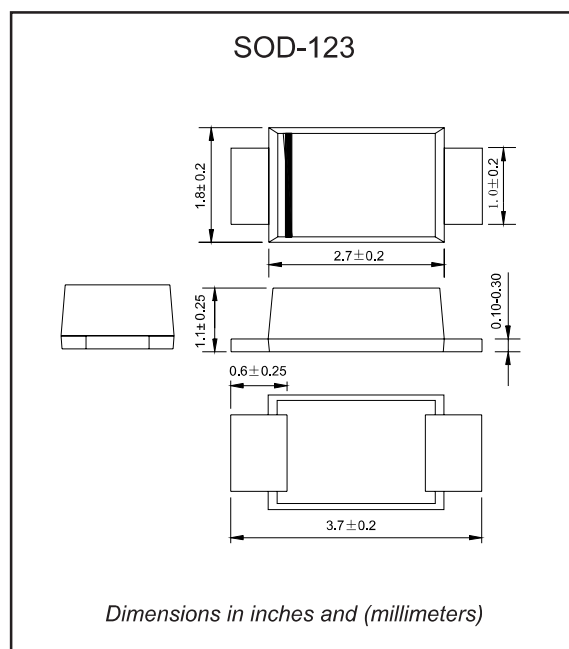
Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
260°C/10 seconds
- ◆ Compliant to RoHS Directive 2011/65/EU
- ◆ Compliant to Halogen-free

Mechanical data

- ◆ **Case**: JEDEC SOD-123 molded plastic body
- ◆ **Terminals**: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity**: Color band denotes cathode end
- ◆ **Mounting Position**: Any

Package outline



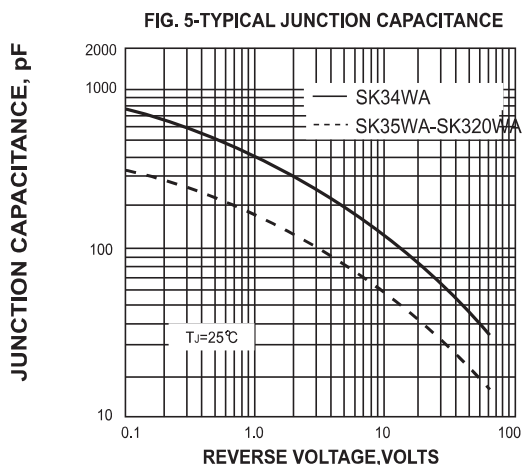
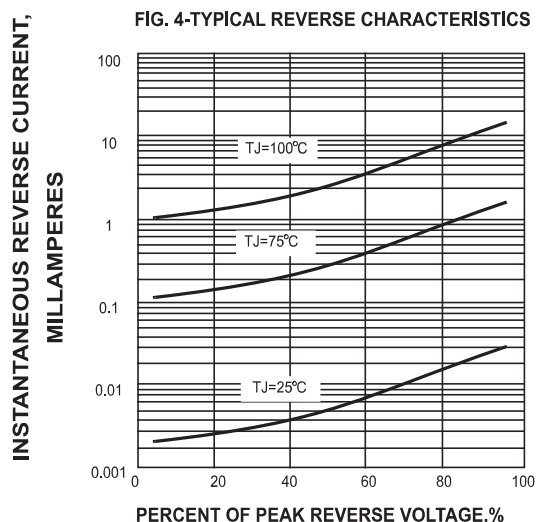
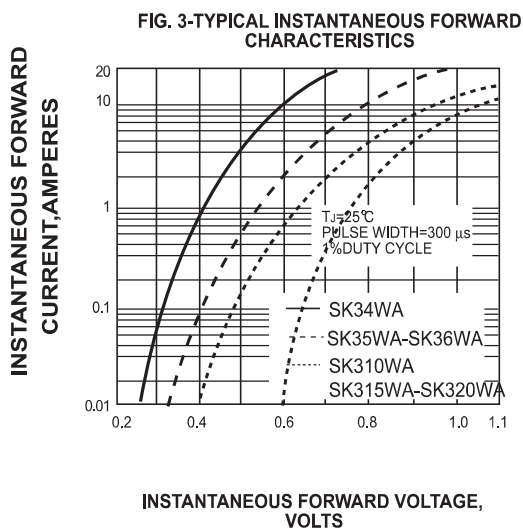
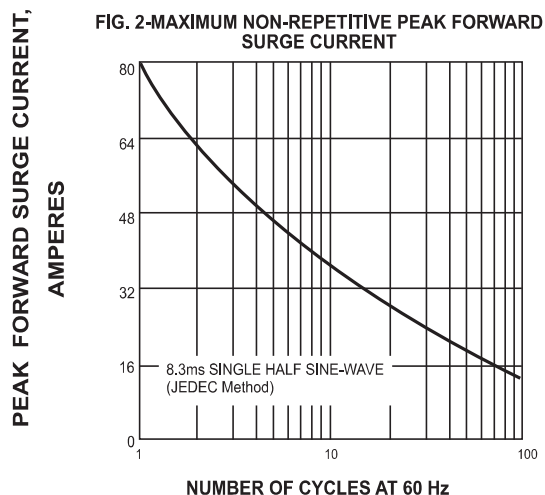
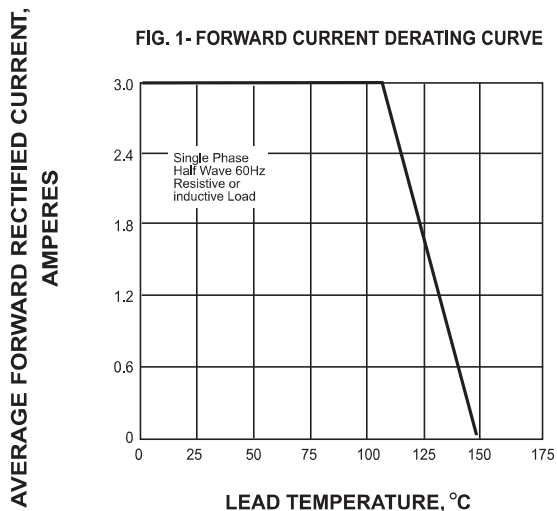
Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	SYMBOLS	SK34WA	SK35WA	SK36WA	SK310WA	SK315WA	SK320WA	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	50	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	35	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	50	60	100	150	200	V
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	3.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	80						A
Maximum instantaneous forward voltage at 3.0A	V _F	0.55	0.70		0.85	0.92		V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5			0.1			mA
		10.0			5.0		2.0	
Typical junction capacitance (NOTE 1)	C _J	240						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	80						°C/W
Operating junction temperature range	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C

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

2.P.C.B. mounted with 2.0x2.0" (5.0x5.0cm) copper pad areas

Rating and characteristic curves



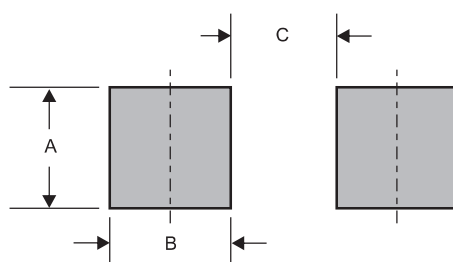
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
SK34WA	K34
SK35WA	K35
SK36WA	K36
SK310WA	K310
SK315WA	K315
SK320WA	K320

Suggested solder pad layout

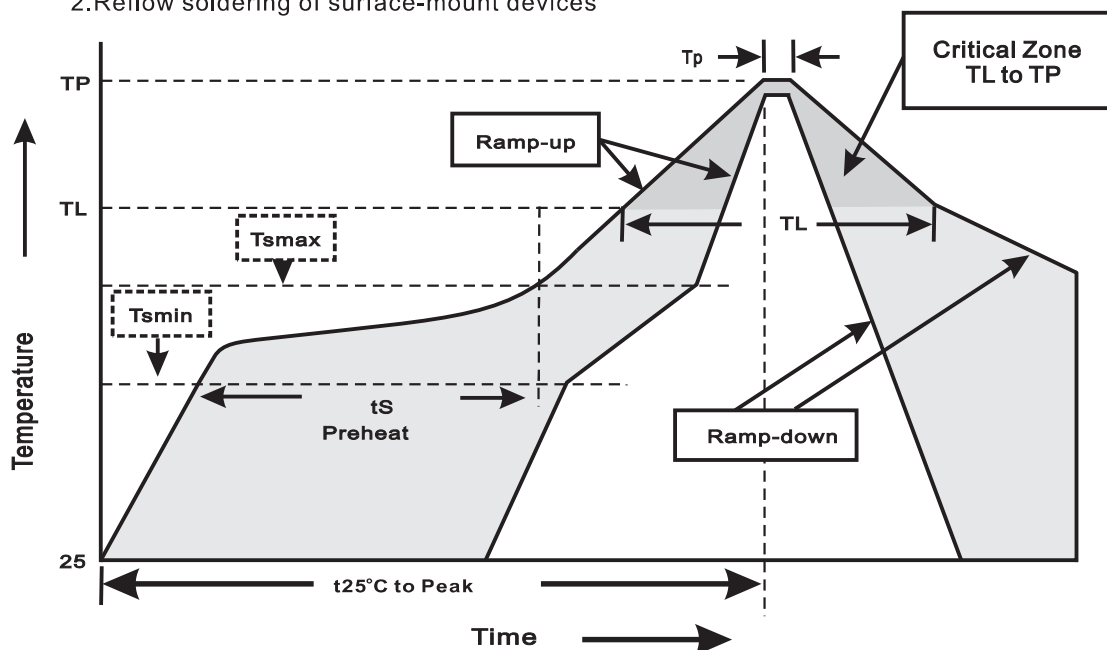


Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.075 (1.90)	0.055 (1.40)	0.075 (1.90)

Suggested thermal profiles for soldering processes

- 1.Storage environment: Temperature=5°C~40°C Humidity=55%±25%
- 2.Reflow soldering of surface-mount devices



3.Reflow soldering

Profile Feature	Soldering Condition
Average ramp-up rate(T _L to T _P)	<3°C/sec
Preheat -Temperature Min(T _{smin}) -Temperature Max(T _{smax}) -Time(min to max)(t _s)	150°C 200°C 60~120sec
T _{smax} to T _L -Ramp-upRate	<3°C/sec
Time maintained above: -Temperature(T _L) -Time(t _L)	217°C 60~260sec
Peak Temperature(T _P)	255°C-0/+5°C
Time within 5°C of actual Peak Temperature(t _P)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes