

SCHOTTKY BARRIER RECTIFIERS

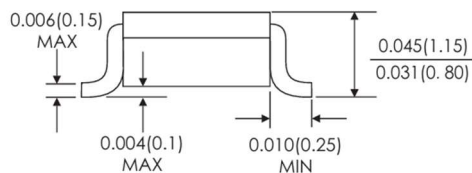
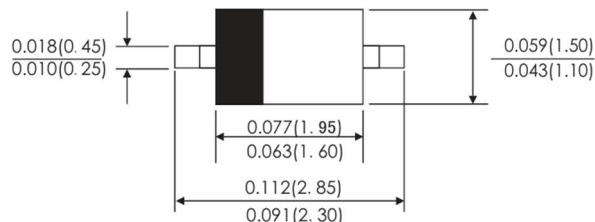
REVERSE VOLTAGE: 20 to 100 VOLTS

FORWARD CURRENT: 1.0 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

SOD-323



Dimensions in inches and (millimeters)

Mechanical Data

- Case: SOD-323 molded plastic body
- Lead Finish: 100% Matte Sn (Tin)
- Polarity: color band denotes cathode end
- Tape Reel: 3000pcs

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	K12WS	K13WS	K14WS	K15WS	K16WS	K18WS	K1AWS	Volts
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	71	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current (See Fig. 1)	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25							Amps
Maximum instantaneous forward voltage at 1.0 A (note 1)	V _F	0.50	0.55	0.70		0.85			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	T _A =25°C	100							μA
	T _A =100°C	5							mA
Typical thermal resistance (Note 2)	R _{θJL}	35							°C/W
Operating junction temperature range	T _J	-55 to +125							°C
Storage temperature range	T _{STG}	-55 to +125							°C

NOTES:

1. Pulse test: 300μs pulse width, 1% duty cycle
2. P.C.B. mounted with 0.2X0.2"(5.0X5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

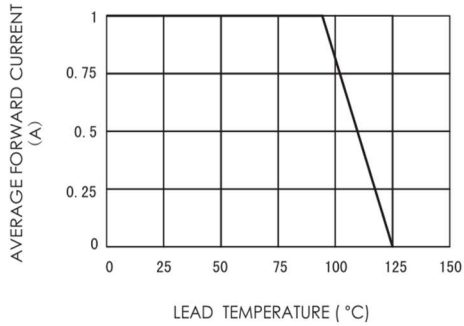


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

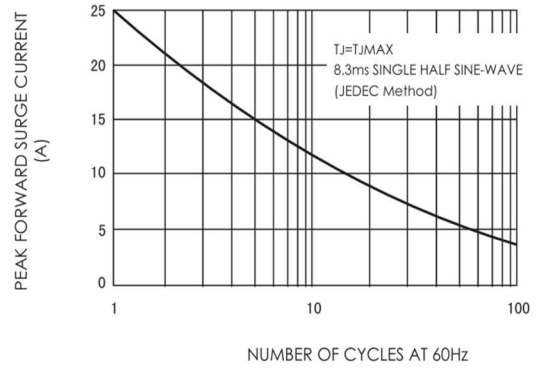


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

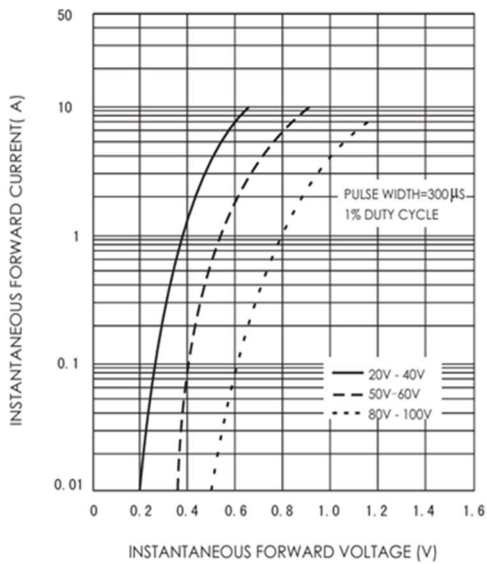


FIG.4-TYPICAL REVERSE CHARACTERISTICS

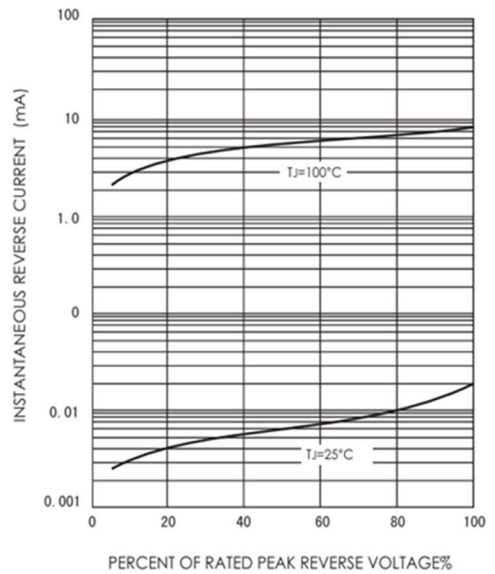


FIG.5-TYPICAL JUNCTION CAPACITANCE

