

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

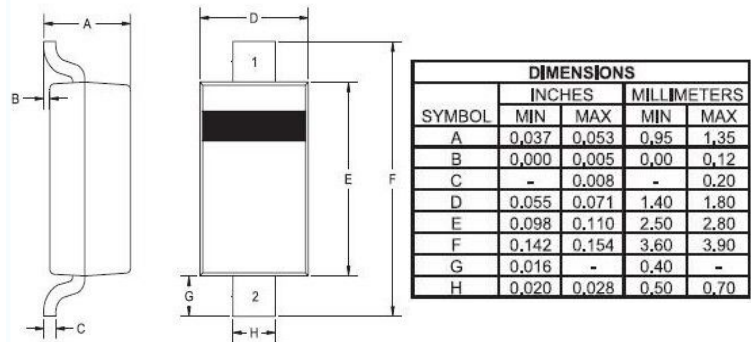
VOLTAGE RANGE

40 Volts

CURRENT

0.35Ampere

SOD123



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SD103AW	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	21	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current		
See Fig. 1	0.35	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	2	A
Maximum Instantaneous Forward Voltage at 0.2A	0.6	V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	0.05	mA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	8	mA
Typical Junction Capacitance (Note1)	20	pF
Typical Thermal Resistance R _{JA} (Note 2)	400	°C/W
Operating Temperature Range T _J	-65 — +125	°C
Storage Temperature Range T _{STG}	-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SD103AW)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

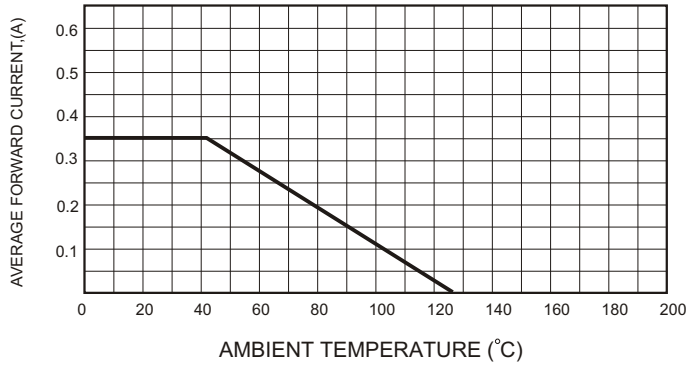


FIG.2-TYPICAL FORWARD CHARACTERISTICS

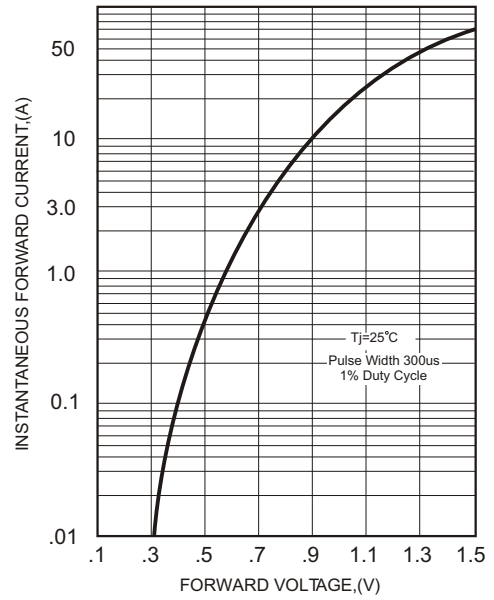


FIG.3 - Power Derating Curve

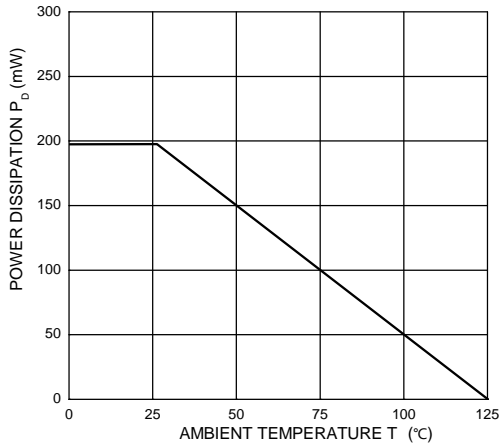


FIG.4-TYPICAL JUNCTION CAPACITANCE

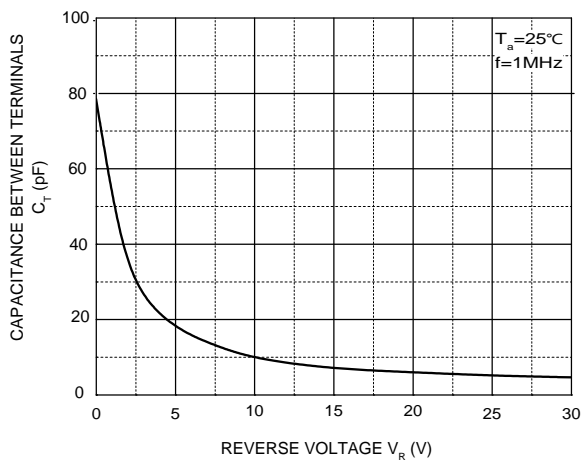


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

