

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

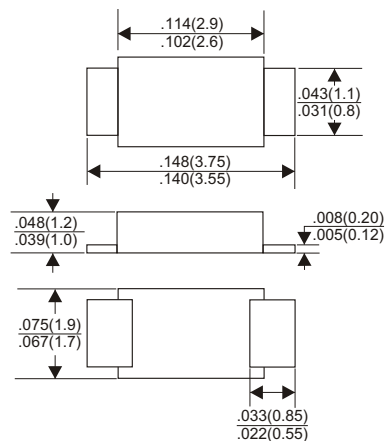
VOLTAGE RANGE

40 Volts

CURRENT

5.0 Ampere

SOD123FL



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	K54	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	35	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current		
At T _L =100°C	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120	A
Maximum Instantaneous Forward Voltage at 5.0A	0.6	V
Maximum DC Reverse Current Ta=25°C	0.1	mA
at Rated DC Blocking Voltage Ta=100°C	5	mA
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance R _{JL} (Note 2)	10	°C/W
Operating Temperature Range T _J	-65 — +150	°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 Lead.

RATING AND CHARACTERISTIC CURVES (K54)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

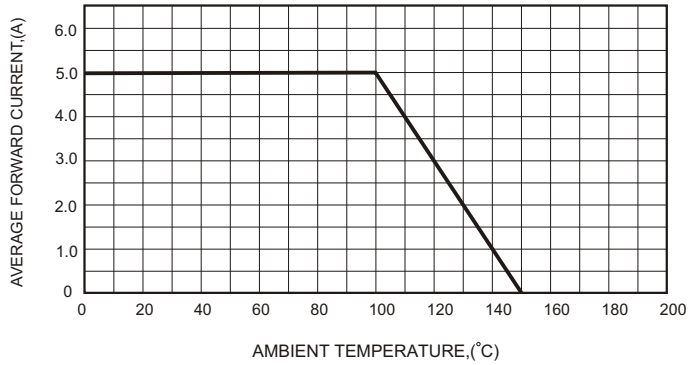


FIG.2-TYPICAL FORWARD CHARACTERISTICS

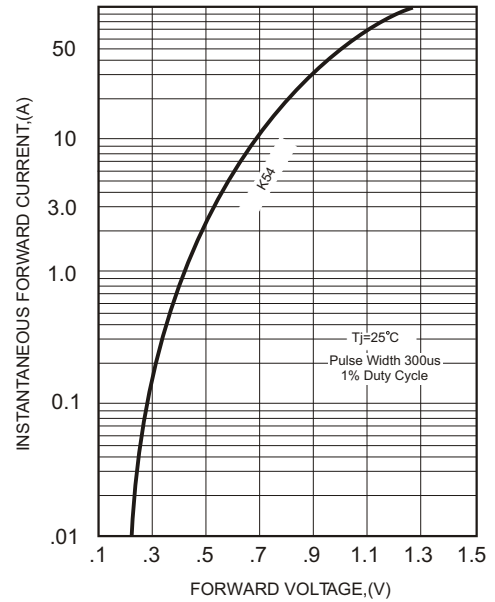


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

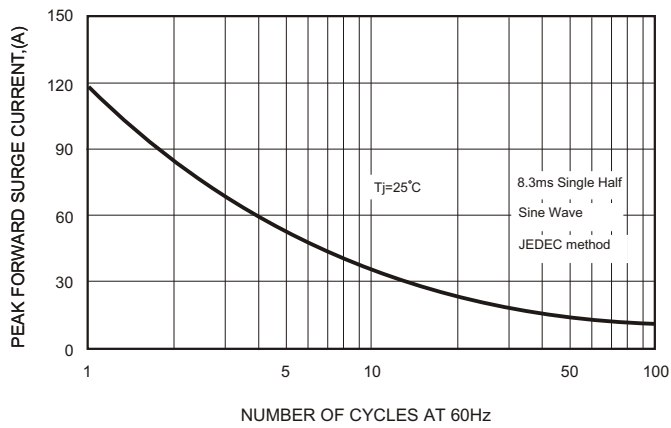


FIG.4-TYPICAL JUNCTION CAPACITANCE

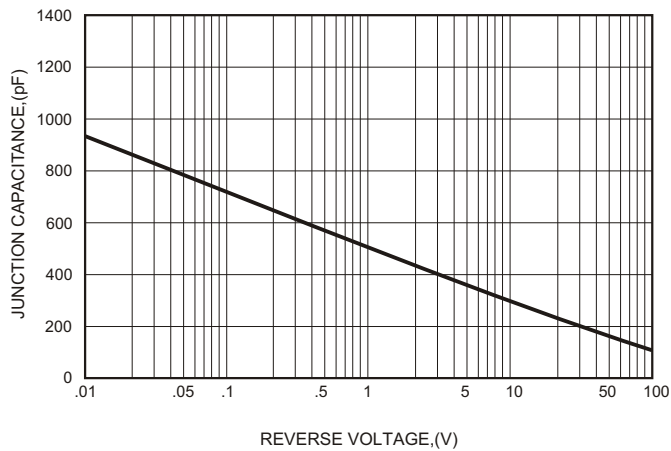


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

