5.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

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

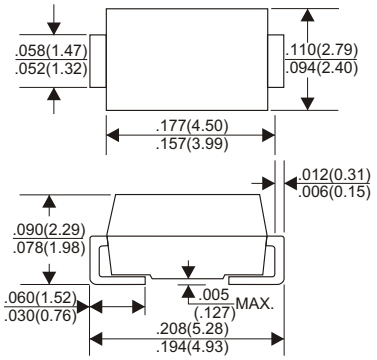
MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.063 grams

VOLTAGE RANGE
40 Volts

CURRENT
5.0 Amperes

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25˚C ambient temperature unless otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SS54L	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current See Fig. 1	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	0.46	V
Maximum DC Reverse Current Ta=25˚C	1.0	mA
at Rated DC Blocking Voltage Ta=100˚C	50	mA
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance R JA (Note 2)	88	˚C/W
Operating Temperature Range T_J	-55 — +125	˚C
Storage Temperature Range T_{STG}	-55 — +150	˚C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on PC board with 5.0mm× 5.0 mm (0.013 mm thick) copper pads as heat sink

RATING AND CHARACTERISTIC CURVES (SS54L)

FIG.1-FORWARD CURRENT DERATING CURVE

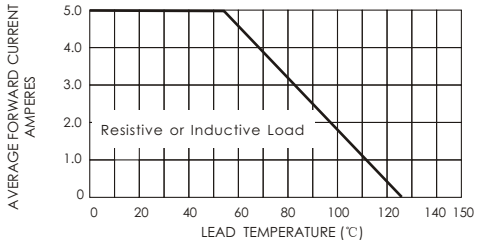


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

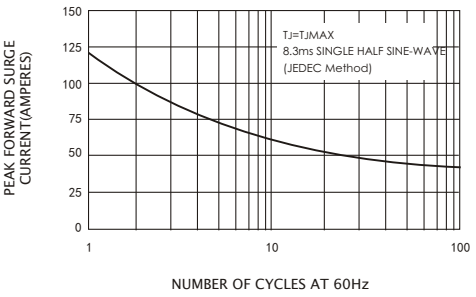


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

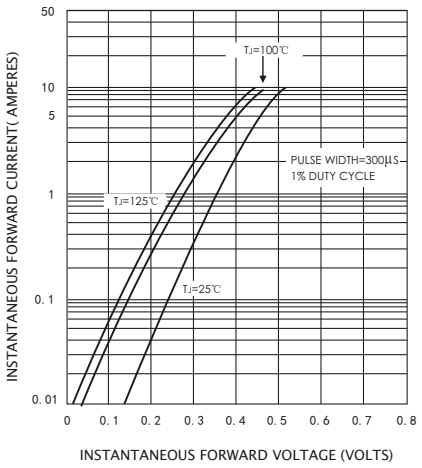


FIG.4-TYPICAL REVERSE CHARACTERISTICS

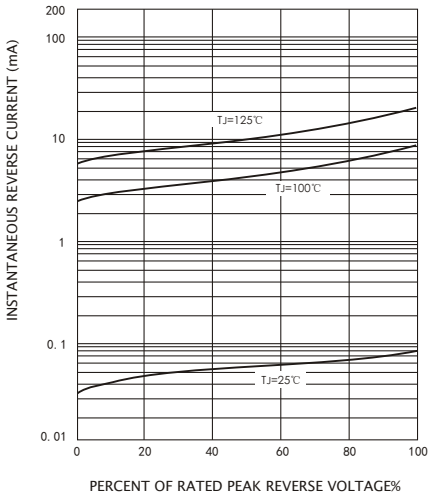


FIG.5-TYPICAL JUNCTION CAPACITANCE

