

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FEATURES

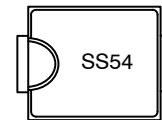
- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

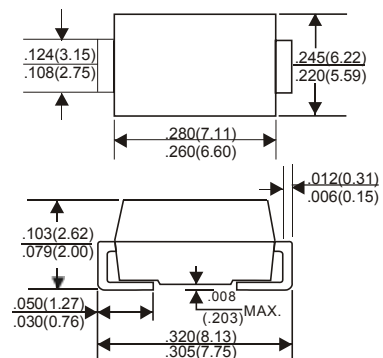
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.21 grams



MARKING DIAGRAMS



DO-214AB(SMC)



Dimensions in inches and (millimeters)

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	SS54	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)	55	C/W
Operating Temperature Range Tj	-55—+125	°C
Storage Temperature Range Tstg	-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

FIG.1-FORWARD CURRENT DERATING CURVE

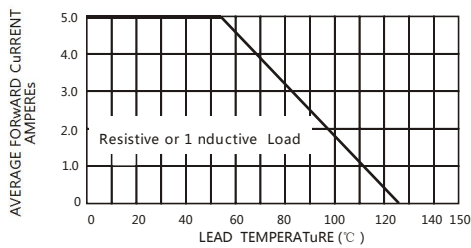


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

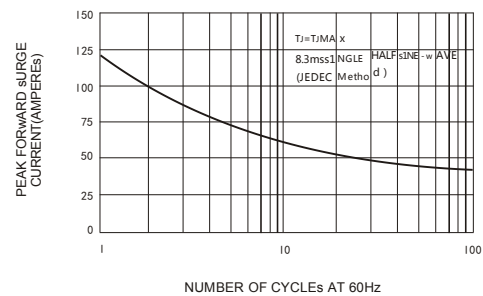


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

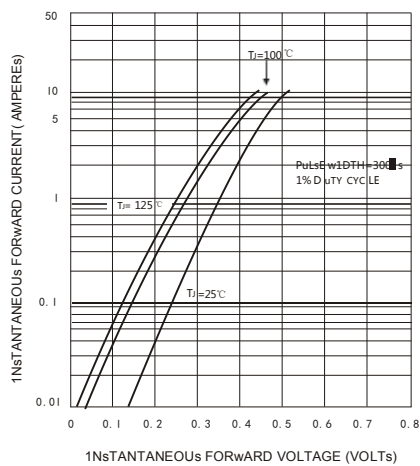


FIG.4-TYPICAL REVERSE CHARACTERISTICS

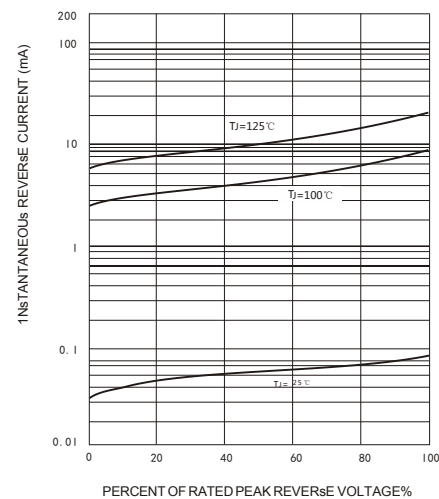
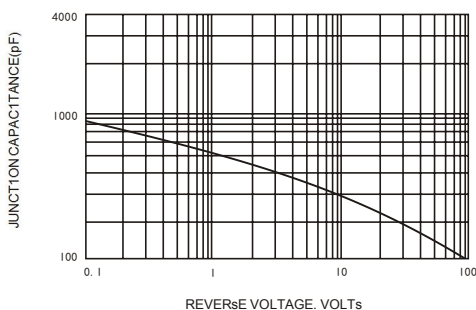


FIG.5-TYPICAL JUNCTION CAPACITANCE



ORDERING INFORMATION

Device	Package	Shipping†
SS54	SMC (Pb-Free)	3000 / Tape & Reel