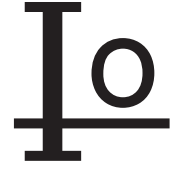


SS54L THRU SS56L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed, low V_F
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing, and polarity protection applications
- Guarding for over voltage protection

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy :UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end

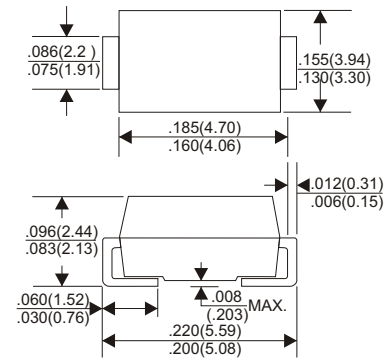
VOLTAGE RANGE

40 to 60 Volts

CURRENT

5.0 Amperes

DO-214AA(SMB)



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%.

	SYMBOLS	SS54L	SS56L	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	Volts
Maximum RMS Voltage	V_{RMS}	28	42	Volts
Maximum DC Blocking Voltage	V_{DC}	40	60	Volts
Maximum Average Forward Rectified Current at $T_L=65^\circ\text{C}$	$I_{(AV)}$	5		Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120		Amps
Maximum Instantaneous Forward Voltage @ 5.0A(Note 1)	V_F	0.45	0.55	Volts
Maximum DC Reverse Current at rated DC Blocking voltage per element	$T_A=25^\circ\text{C}$	0.5		mA
	$T_A=100^\circ\text{C}$	20		
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55		$^\circ\text{C/W}$
	$R_{\theta JL}$	12		
Operating Junction Temperature	T_J	(-55 to +125)		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)		$^\circ\text{C}$

Notes:

1. Pulse test: 300 μS pulse width, 1% duty cycle
2. PCB mounted with 0.55" \times 0.55" (14 \times 14mm) copper pads

SS54L THRU SS56L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

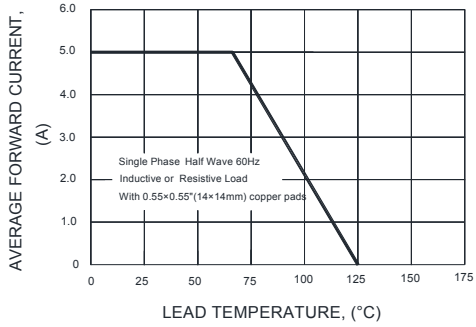


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

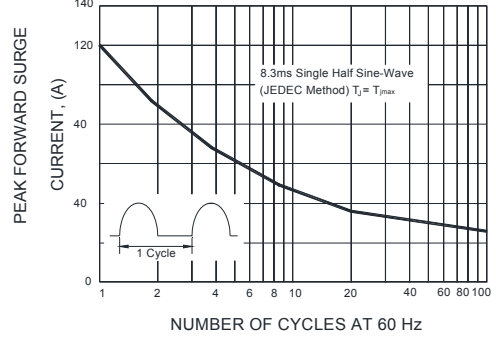


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

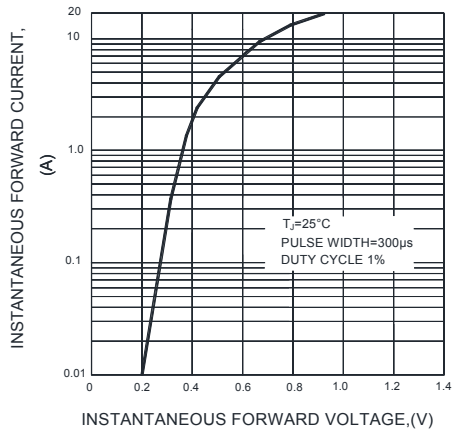


FIG.4-TYPICAL REVERSE CHARACTERISTICS

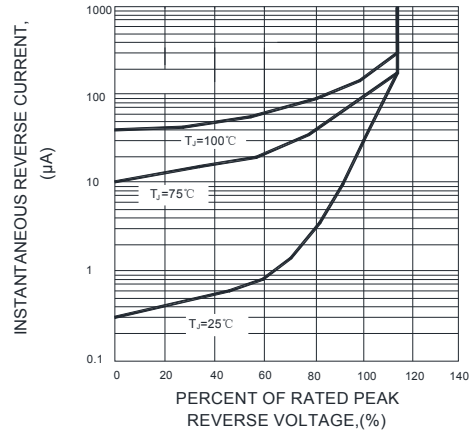


FIG.5-TYPICAL JUNCTION CAPACITANCE

