



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SSL42 THRU SSL44

VOLTAGE RANGE 20 to 40 Volts

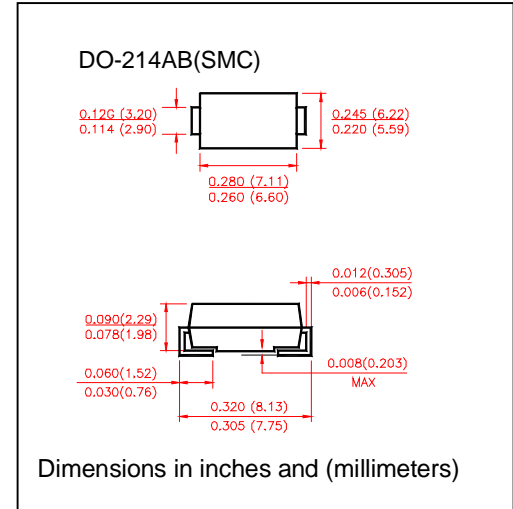
CURRENT 4.0 Ampere

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
- Guardring 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
- Weight: 0.007 ounce, 0.25 gram-DO-214AB(SMC)



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	SSL42	SSL43	SSL44	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	20	30	40	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T_L see figure1 $T_L=95^\circ\text{C}$	$I_{(AV)}$	4.0			Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100			Amps
Maximum Instantaneous Forward Voltage @ 4.0A(Note1)	V_F	0.42		0.46	Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ\text{C}$	0.5			mA
	$T_A = 100^\circ\text{C}$				
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55			°C/W
	$R_{\theta JL}$	12			
Operating Junction Temperature	T_J	(-55 to +150)			°C
Storage Temperature Range	T_{STG}	(-55 to +150)			°C

Notes:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. PCB mounted with 0.2" \times 0.2" (5.0cm \times 5.0cm) copper pads



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SSL42 THRU SSL44

VOLTAGE RANGE 20 to 40Volts
CURRENT 4.0 Ampere

RATING AND CHARACTERISTIC CURVES SSL42 THRU SSL44

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

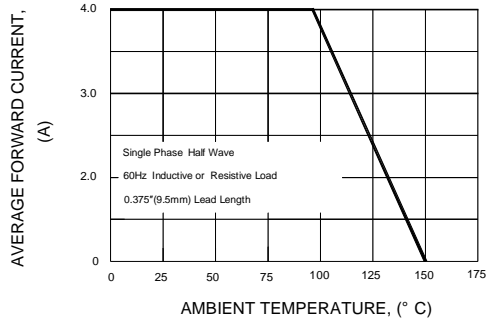


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

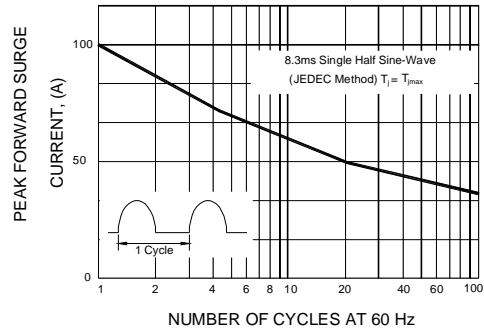


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

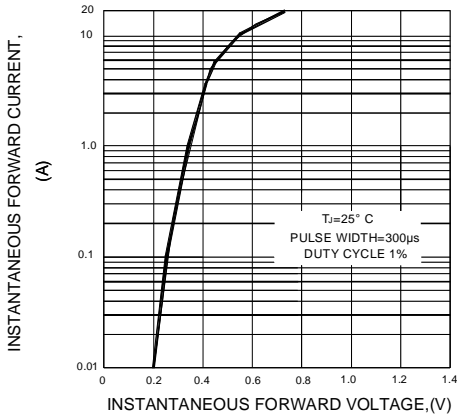


FIG.4-TYPICAL REVERSE CHARACTERISTICS

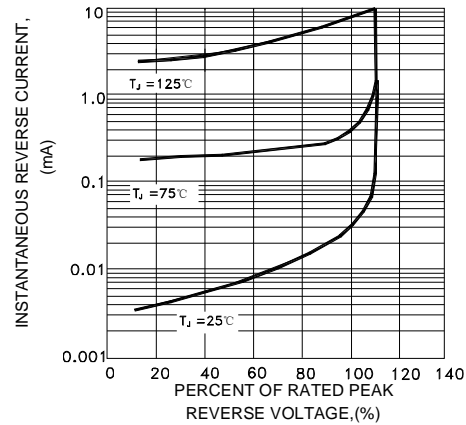


FIG.5-TYPICAL JUNCTION CAPACITANCE

