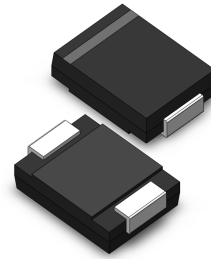


VOLTAGE RANGE: 20 - 40V
CURRENT: 4.0 A

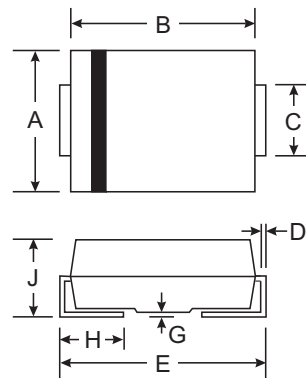


Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SL42	SL43	SL44	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	Volts
Maximum average forward rectified current (NOTE 2) at T _L (SEE FIG. 1)	I _(AV)		4.0 8.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}		150		Amps
Maximum instantaneous forward voltage at: (NOTE 1) I _F =4.0A, T _A =125°C I _F =4.0A, T _A =25°C I _F =8.0A, T _A =125°C I _F =8.0A, T _A =25°C	V _F		0.31 0.42 0.37 0.47	0.35 0.44 0.41 0.50	Volts
Maximum DC reverse current (NOTE 1) T _A =25°C at rated DC blocking voltage T _A =100°C	I _R		0.5 35.0		mA
Typical thermal resistance (NOTE 2)	R _{θJA} R _{θJL}		50 14		°C/W
Operating junction temperature range	T _J		-55 to +125		°C
Storage temperature range	T _{STG}		-55 to +150		°C

NOTES:

- (1) Pulse test: 300μs pulse width, 1% duty cycle,
- (2) P.C.B. mounted 0.55 x 0.55" (14 x 14mm) copper pad areas, T_L=90°C
- (3) Mounted on Al plate, T_L=60°C, R_{θJL}=6°C/W

RATINGS AND CHARACTERISTIC CURVES SL42 THRU SL44

FIG. 1 - FORWARD CURRENT DERATING CURVE

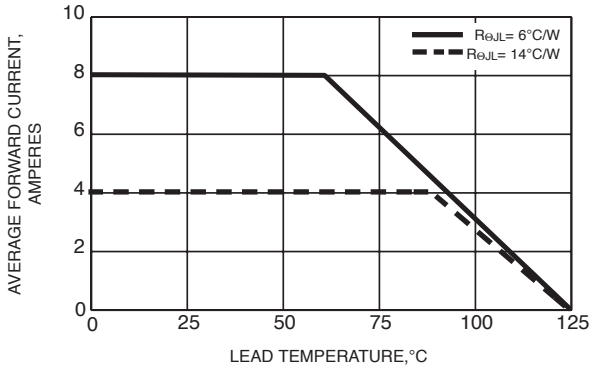


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

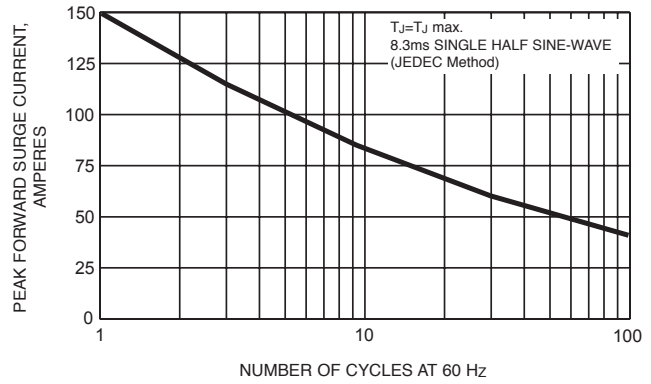


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

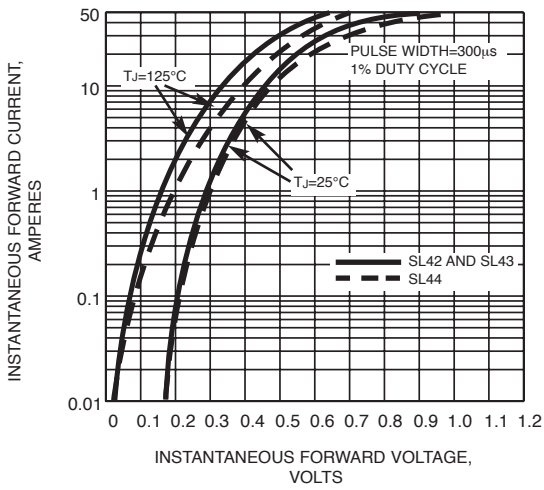


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

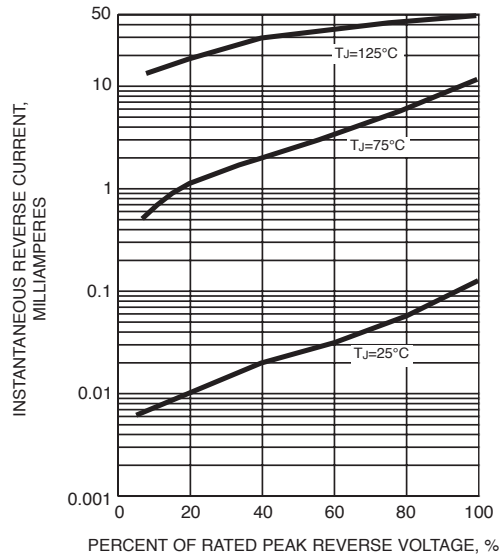


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

