

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FEATURES

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement High
- forward surge current capability
- High temperature soldering guaranteed:
- 250 ° C/10 seconds at terminals
- AEC-Q101 qualified (Automotive grade with suffix "Q".)
- Expsemi electronics



MECHANICAL DATA

- **Case:** JEDEC DO-214AC molded plastic body
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

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 current derate by 20%.

Number	SYMBOLS	SS315AL	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	150	VOLTS
Maximum RMS voltage	V_{RMS}	105	VOLTS
Maximum DC blocking voltage	V_{DC}	150	VOLTS
Maximum average forward rectified current at TL(see fig.1)	$I_{(AV)}$	3.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80	Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.80	Volts
Maximum DC reverse current $T_A=25^{\circ}C$	I_R	1.0	μA
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	80.0	$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +175	$^{\circ}C$

Note: 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

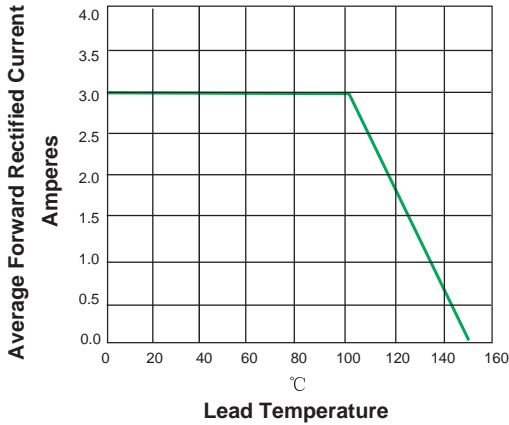


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

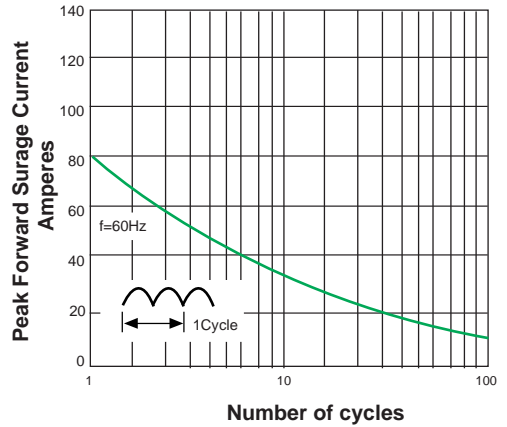


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

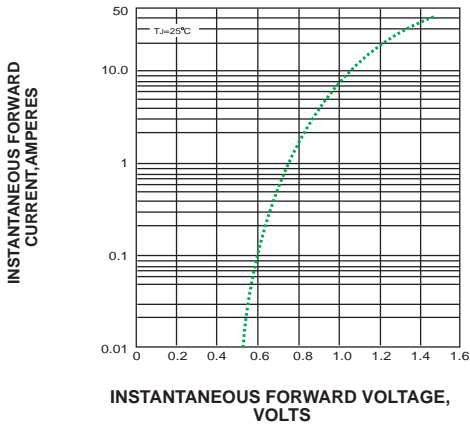
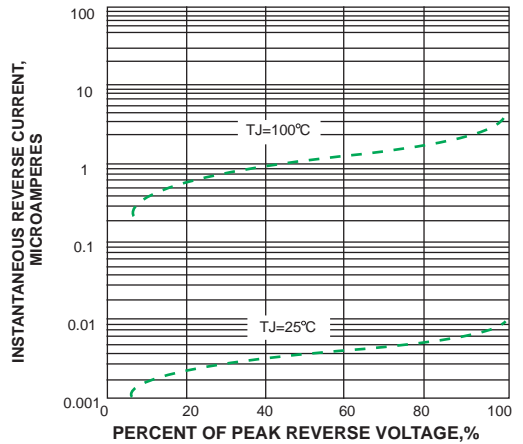
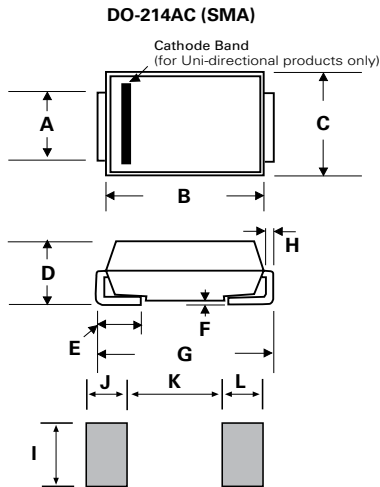


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Dimensions

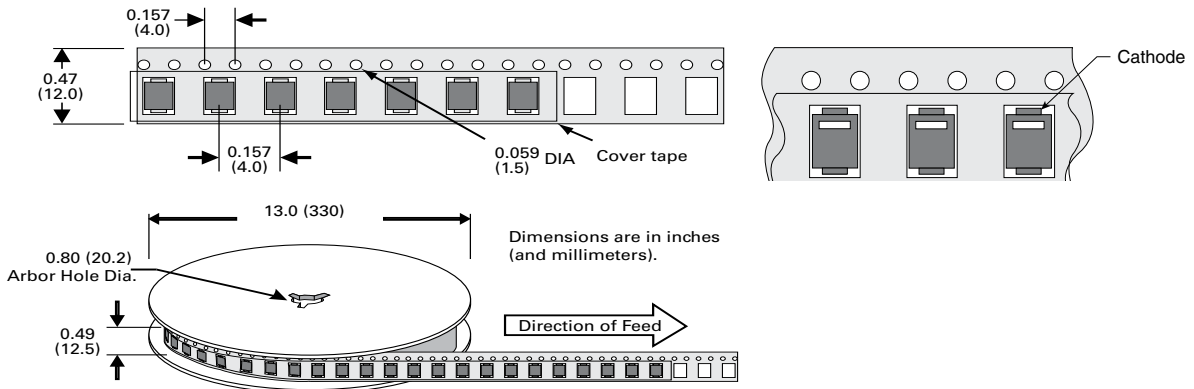


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.047	0.067	1.200	1.700
B	0.154	0.185	3.900	4.700
C	0.095	0.114	2.400	2.900
D	0.075	0.096	1.900	2.440
E	0.030	0.060	0.760	1.520
F	-	0.008	-	0.203
G	0.185	0.222	4.700	5.660
H	0.006	0.012	0.152	0.305
I	0.066	-	1.680	-
J	0.068	-	1.720	-
K	-	0.090	-	2.300
L	0.068	-	1.720	-

Ordering Information

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SS315A	DO-214AC	5000	Tape & Reel - 12mm tape/13" reel	EIA STD RS-481

Tape and Reel Specification



Note: Devices are packed in accordance with EIA standard RS-481-A and specification given above.