

SURFACE MOUNT RECTIFIER

Voltage 50 to 1000 Volt Current 2 Ampere

Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- AEC-Q101 qualified (Automotive grade with suffix Q)
- Exsemi technology



Mechanical Data

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)

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%.

PARAMETER	SYMBOL	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current : 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	55							A
Maximum Forward Voltage at 2A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 100							μA
Maximum Junction Capacitance (Note 1)	C_J	30							pF
Typical Junction Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	35 75							$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$

NOTES :

1. Measured at 1MHZ and applied $V_R=4$ volts.
2. $2.8 \times 8mm^2$ pads.

RATING AND CHARACTERISTIC CURVES

Fig.1 FORWARD CURRENT DERATING CURVE

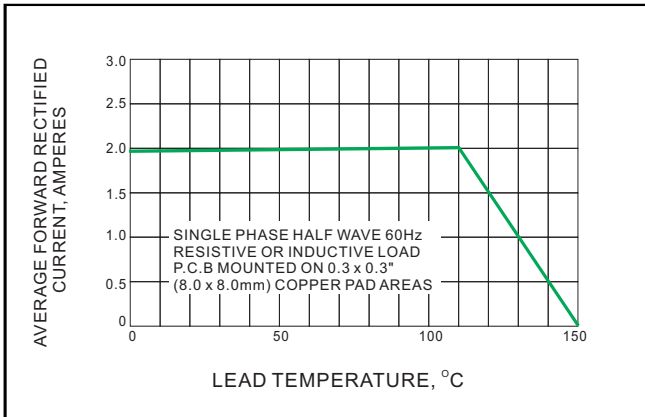


Fig.2 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

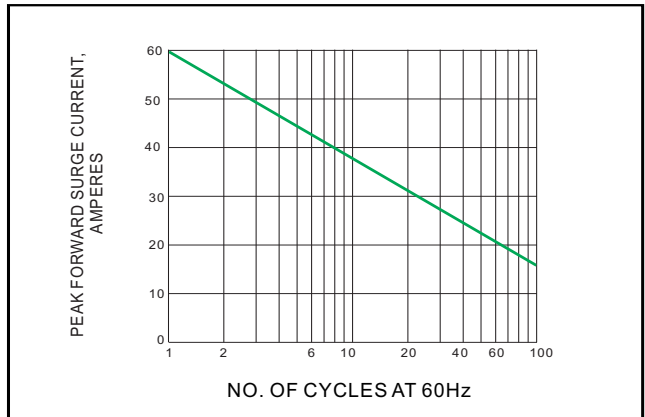


Fig.3-TYPICAL REVERSE CHARACTERISTIC

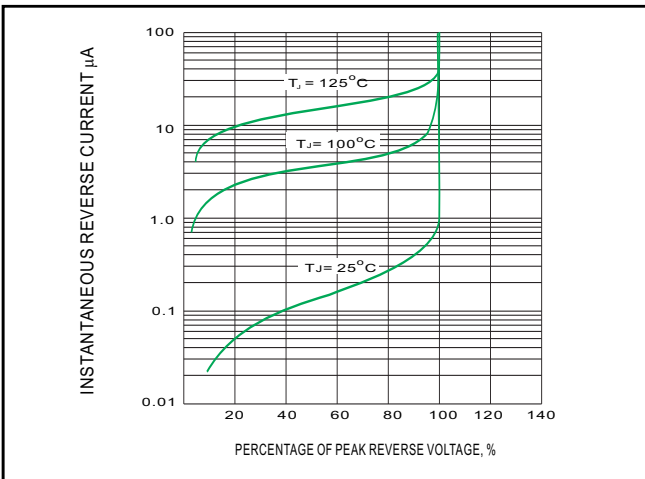


FIG.4 TYPICAL FORWARD CHARACTERISTICS

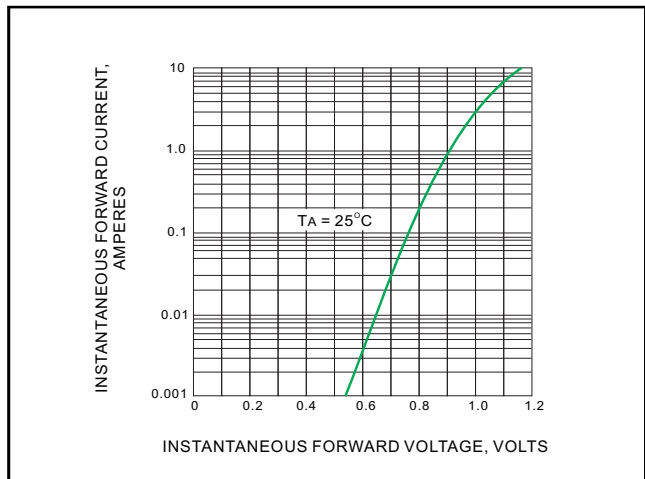
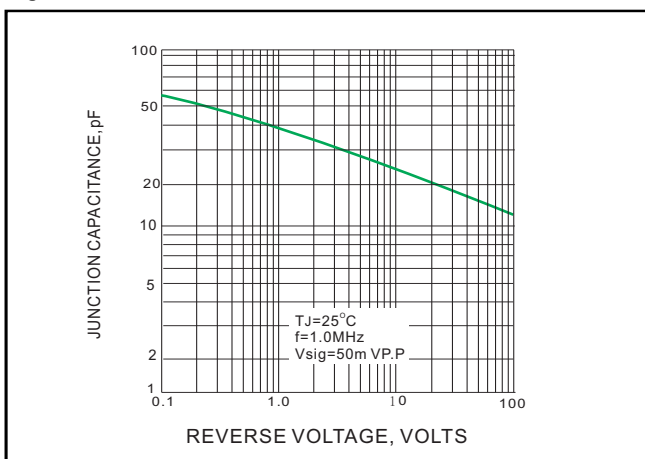
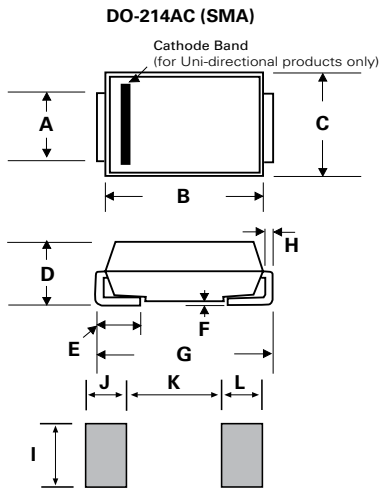


Fig.5 TYPICAL JUNCTION CAPACITANCE



Dimensions

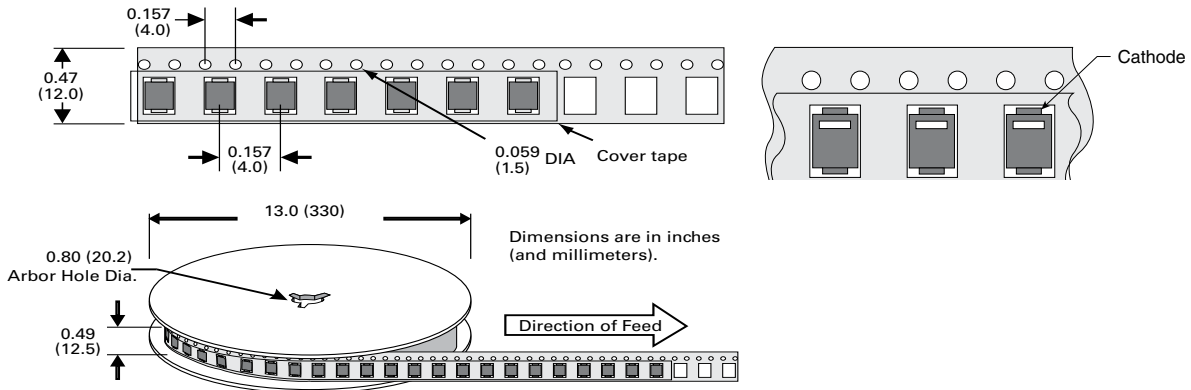


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.047	0.067	1.200	1.700
B	0.154	0.185	3.900	4.700
C	0.095	0.114	2.400	2.900
D	0.075	0.096	1.900	2.440
E	0.030	0.060	0.760	1.520
F	-	0.008	-	0.203
G	0.185	0.222	4.700	5.660
H	0.006	0.012	0.152	0.305
I	0.066	-	1.680	-
J	0.068	-	1.720	-
K	-	0.090	-	2.300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

Ordering Information

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
S2XA	DO-214AC	5000	Tape & Reel - 12mm tape/13" reel	EIA STD RS-481

Tape and Reel Specication



Note: Devices are packde in accordance with EIA standard RS-481-Aand specification given above.