

- High surge current capability
- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



MECHANICAL DATA

Case: Sub SMA

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

Base P/N with prefix "H" on packing code - AEC-Q101 qualified

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity: Indicated by cathode band

Weight: 0.019 g (approximately)

Sub SMA

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	SS 12L	SS 13L	SS 14L	SS 15L	SS 16L	SS 19L	SS 19L	
Marking code		12L	13L	14L	15L	16L	19L	19L	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	90	90	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	63	63	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	90	90	
Maximum average forward rectified current	$I_{F(AV)}$	1							
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30							
Maximum instantaneous forward voltage (Note 1) @ 0.5A @ 1.0A	V_F	0.385 0.45	0.43 0.50	0.51 0.55	0.58 0.70		0.70 0.80		
Maximum reverse current @ rated VR $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	0.4						0	
		8.0	6.0					0	
		-							0
Voltage rate of change (Rated V_R)	dV/dt	10000							
Typical thermal resistance	$R_{\theta JL}$	45							
	$R_{\theta JA}$	100							
Operating junction temperature range	T_J	- 55 to +125				- 55 to +150			
Storage temperature range	T_{STG}	- 55 to +150							

Note 1: Pulse test with PW=300 μ s, 1% duty cycle

SS1XL (Note 1)	Prefix "H"	MT	Suffix "G"	Sub SMA	7,500 / 13" Plastic re
		RQ		Sub SMA	10,000 / 13" Plastic r
		MQ		Sub SMA	10,000 / 13" Plastic r
		R3		Sub SMA	1,800 / 7" Plastic re
		RF		Sub SMA	3,000 / 7" Plastic re
		R2		Sub SMA	7,500 / 13" Paper re
		M2		Sub SMA	7,500 / 13" Plastic re
		RH		Sub SMA	10,000 / 13" Paper re
		MH		Sub SMA	10,000 / 13" Plastic re

Note 1: "x" defines voltage from 20V (SS12L) to 150V (SS115L)

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESC
SS16L RU	SS16L		RU		
SS16L RUG	SS16L		RU	G	Green
SS16LHRU	SS16L	H	RU		AEC-Q1

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

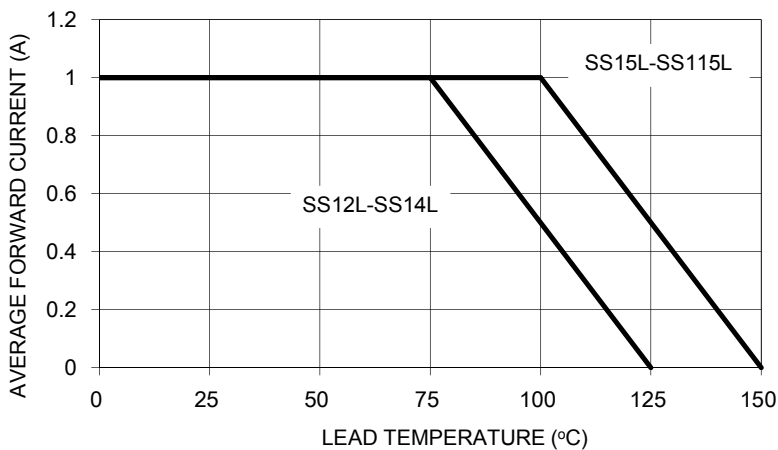


FIG. 2 MAXIMUM FORWARD SURGE

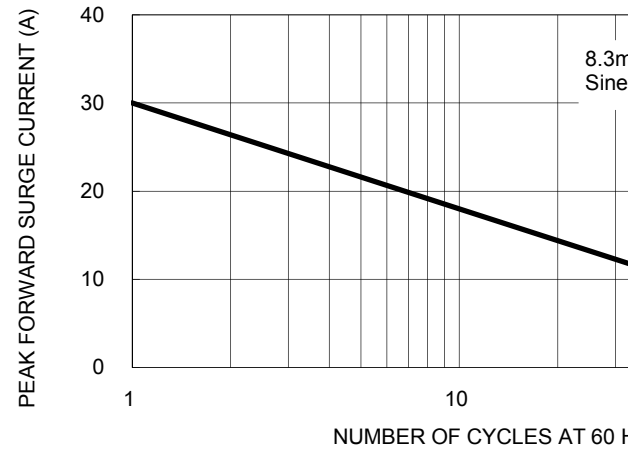


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

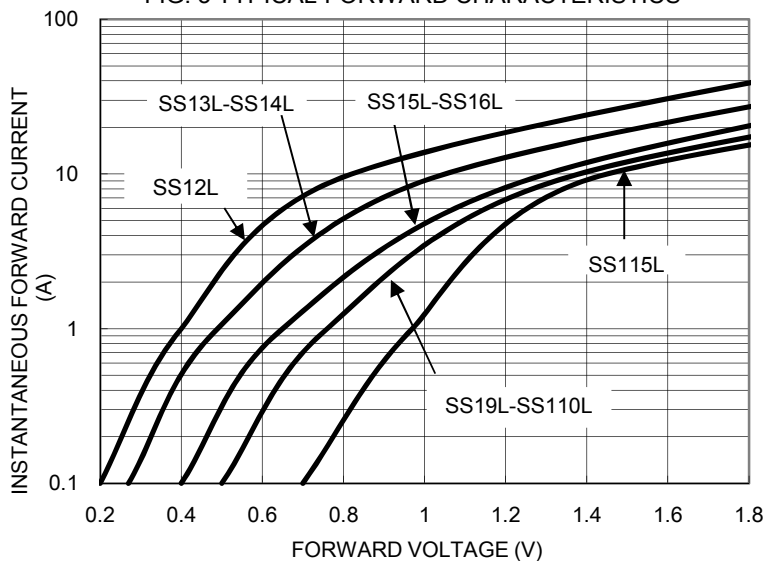
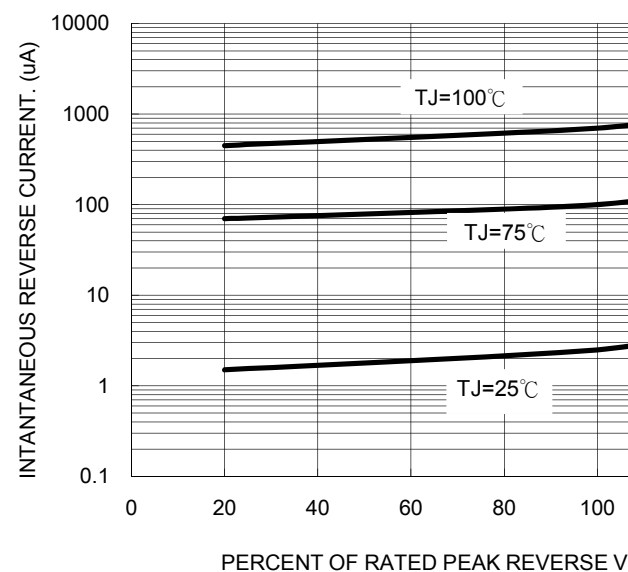
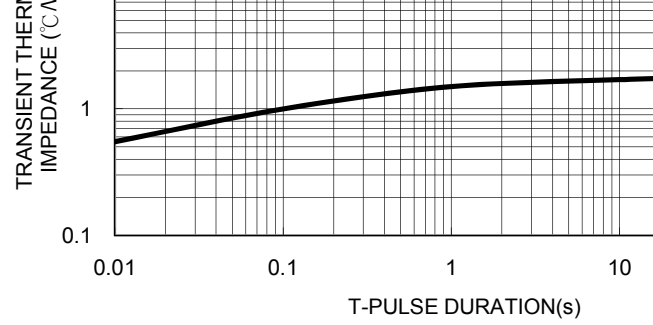
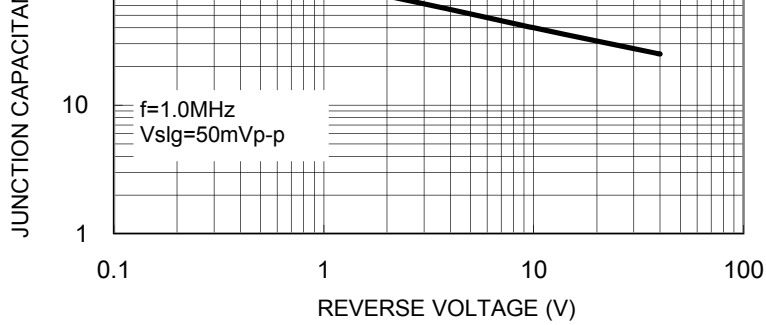
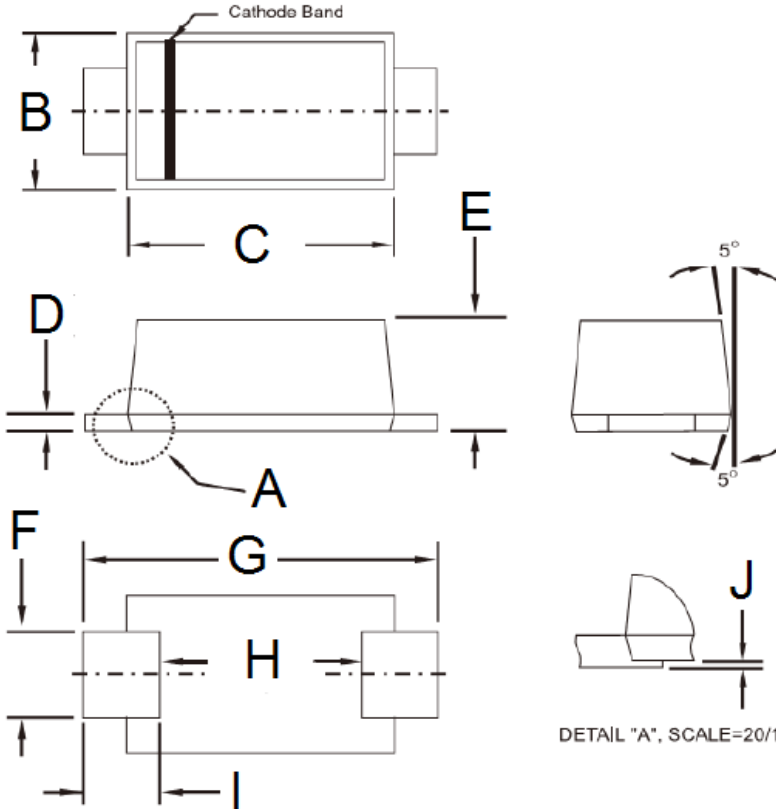


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



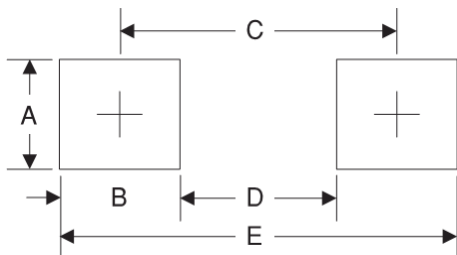


PACKAGE OUTLINE DIMENSIONS



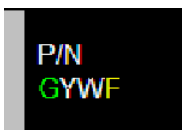
DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
B	1.70	1.90	0.067	0.075
C	2.70	2.90	0.106	0.114
D	0.16	0.30	0.006	0.012
E	1.23	1.43	0.048	0.056
F	0.80	1.20	0.031	0.047
G	3.40	3.80	0.134	0.150
H	2.45	2.60	0.096	0.102
I	0.35	0.85	0.014	0.033
J	0.00	0.10	0.000	0.004

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	1.4	0.055
B	1.2	0.047
C	3.1	0.122
D	1.9	0.075
E	4.3	0.169

MARKING DIAGRAM



- P/N = Marking Code
- G = Green Compound
- YW = Date Code
- F = Factory Code

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