

- High temperature metallurgically bonded construction
- Fast switching for high efficiency
- 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



Sub SMA

MECHANICAL DATA

Case: Sub SMA

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (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)

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

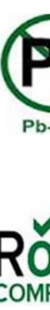
PARAMETER	SYMBOL	RSF AL	RSF BL	RSF DL	RSF GL	RSF JL	RSF KL
Marking code		FAL	FBL	FDL	FGL	FJL	FKL
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800
Maximum average forward rectified current	$I_{F(AV)}$	0.5					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	10					
Maximum instantaneous forward voltage (Note 1) @ 0.5 A	V_F	1.3					
Maximum reverse current @ rated VR $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	5 50					
Typical junction capacitance (Note 2)	C_j	4					
Maximum reverse recovery time (Note 3)	T_{rr}	150				250	
Typical thermal resistance	$R_{\theta JC}$ $R_{\theta JA}$	32 150					
Operating junction temperature range	T_J	- 55 to +150					
Storage temperature range	T_{STG}	- 55 to +150					

Note 1: Pulse test with $PW=300\mu\text{s}$, 1% duty cycle

Note 2: Measured at 1 MHz and Applied $V_R=4.0$ Volts.

Note 3: Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

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

Note 1: "x" defines voltage from 50V (RSFAL) to 1000V (RSFML)

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESIGNATION
RSFML RU	RSFML		RU		
RSFML RUG	RSFML		RU	G	Green
RSFMLHRU	RSFML	H	RU		AEC-Q101

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

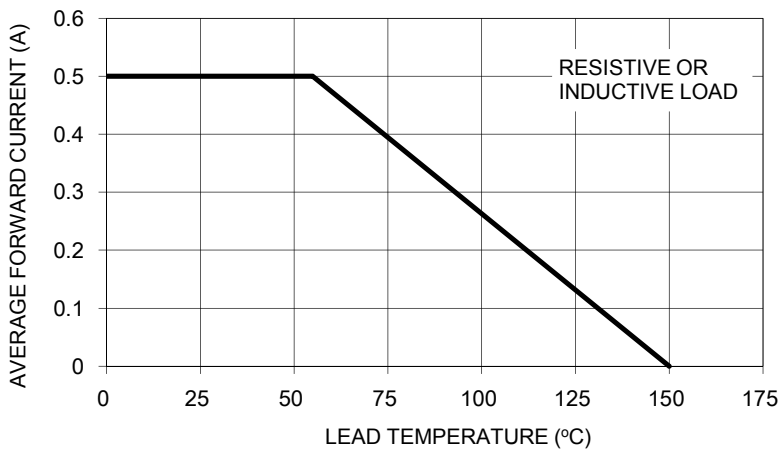


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

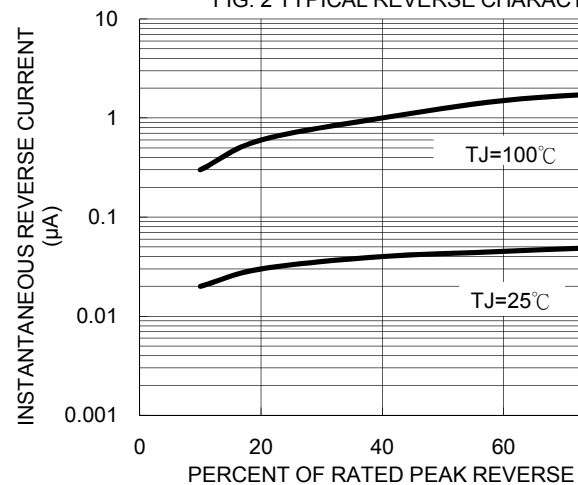


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

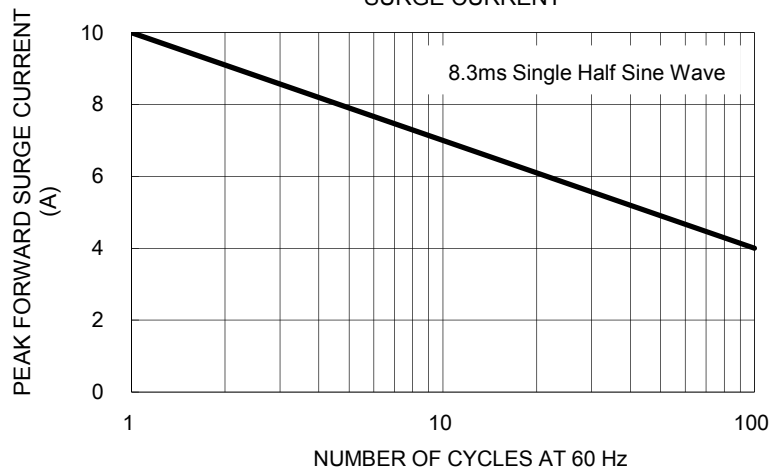
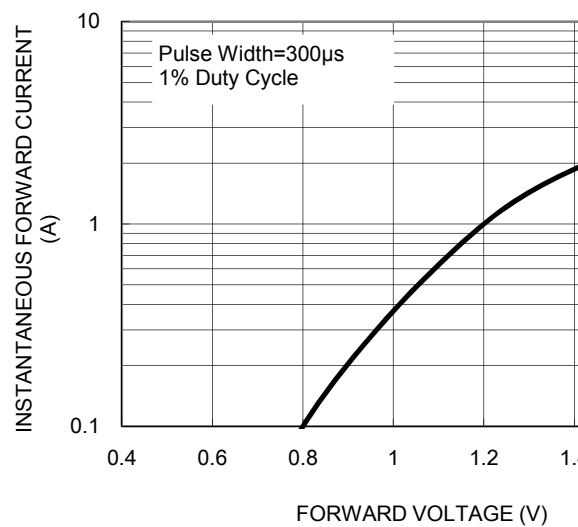
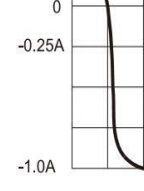
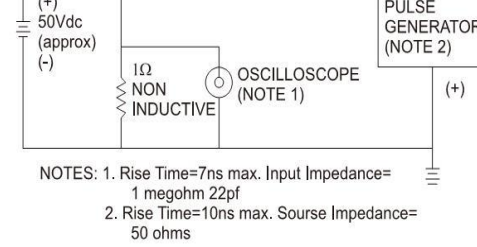
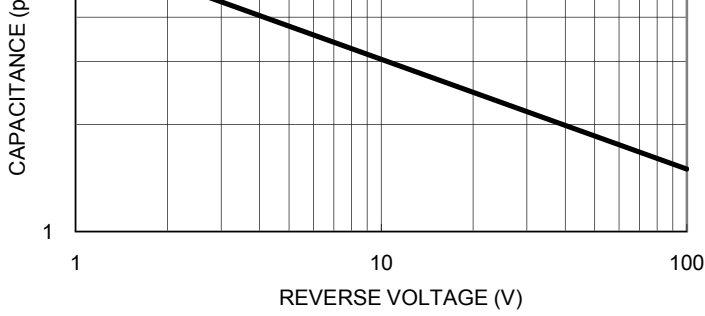
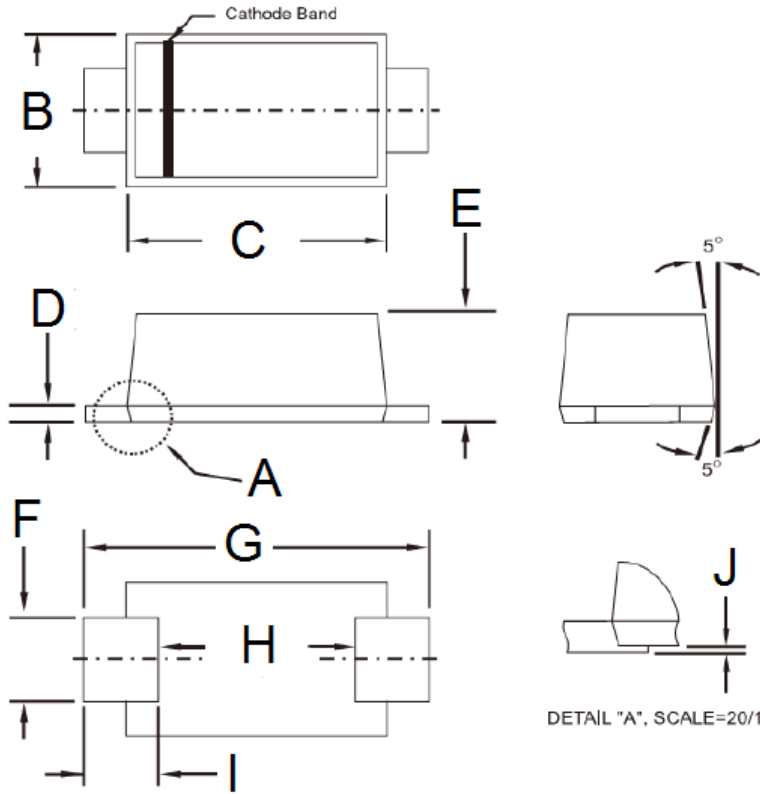


FIG. 5 TYPICAL FORWARD CHARACTERISTICS



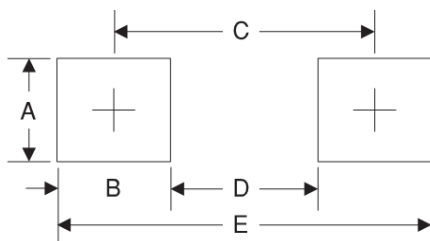


PACKAGE OUTLINE DIMENSIONS



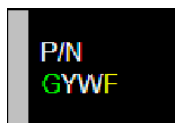
DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
B	1.70	1.90	0.067	
C	2.70	2.90	0.106	
D	0.16	0.30	0.006	
E	1.23	1.43	0.048	
F	0.80	1.20	0.031	
G	3.40	3.80	0.134	
H	2.45	2.60	0.096	
I	0.35	0.85	0.014	
J	0.00	0.10	0.000	

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

Document Number: DS_D1405033

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