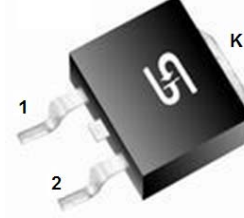


- High surge current capability
- Low power loss
- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



MECHANICAL DATA

Case: TO-263AB (D²PAK)

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

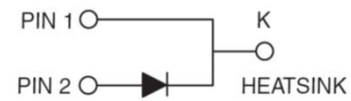
Meet JESD 201 class 1A whisker test

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

Polarity: As marked

Weight: 1.33 g (approximately)

TO-263AB (D²PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SFAS 801G	SFAS 802G	SFAS 803G	SFAS 804G	SFAS 805G	SFAS 806G	SFAS 807G
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	
Maximum average forward rectified current	I _{F(AV)}	8						
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	125						
Maximum instantaneous forward voltage I _F = 8 A	V _F	0.95				1.3		
Maximum reverse current @ rated V _R	I _R	T _J =25°C						
		T _J =100°C						
Maximum reverse recovery time (Note 1)	t _{rr}	35						
Typical junction capacitance (Note 2)	C _J	80				60		
Typical thermal resistance	R _{θJC}	2.2						
Operating junction temperature range	T _J	- 55 to +150						
Storage temperature range	T _{STG}	- 55 to +150						

Note 1: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Document Number: DS_D1405074

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DF
SFAS801G RN	SFAS801G		RN		
SFAS801G RNG	SFAS801G		RN	G	Gr
SFAS801GHRN	SFAS801G	H	RN		AEC

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

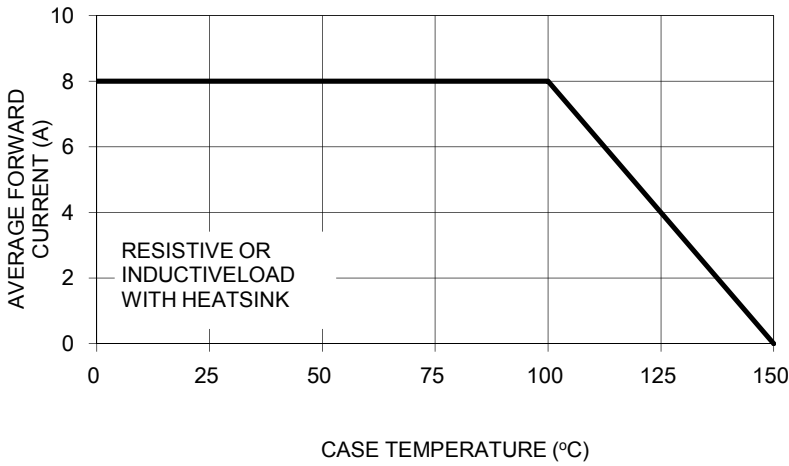


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

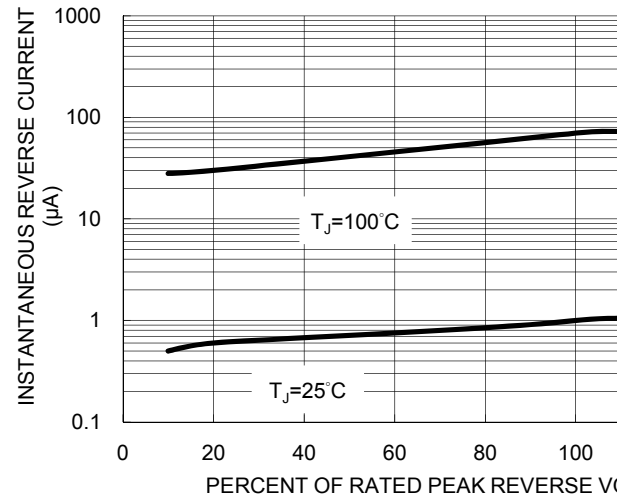


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

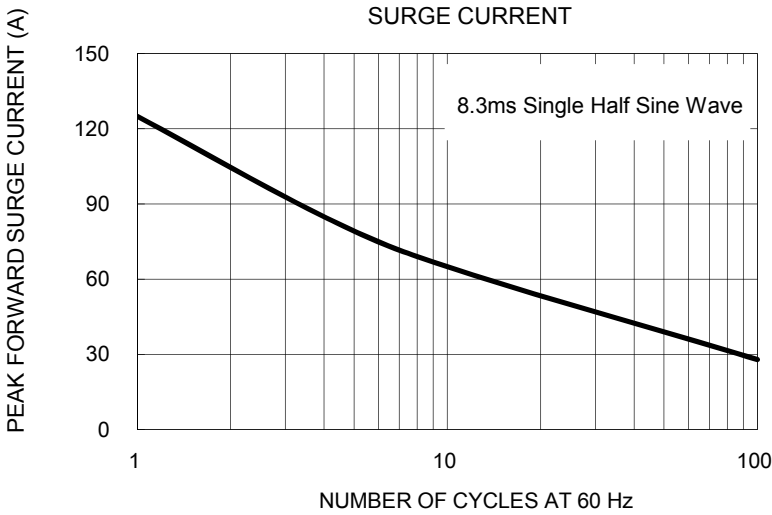
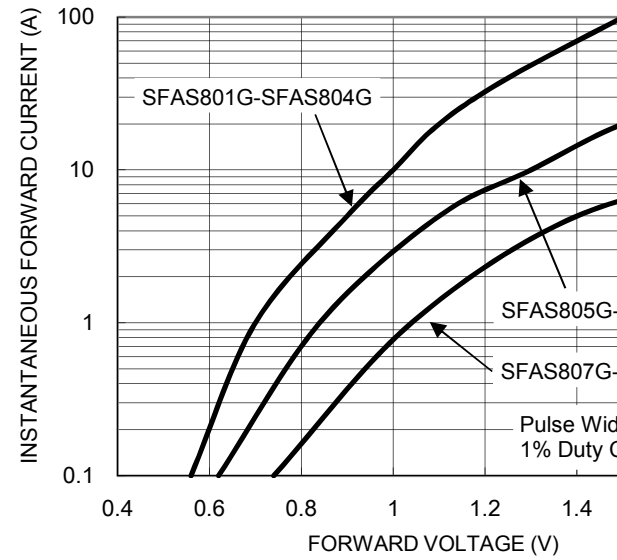
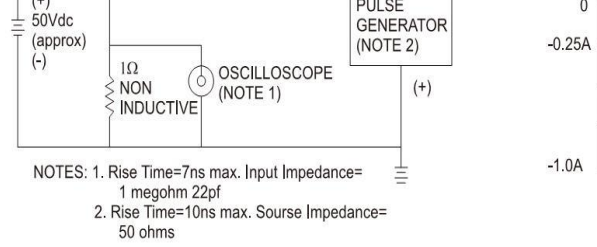
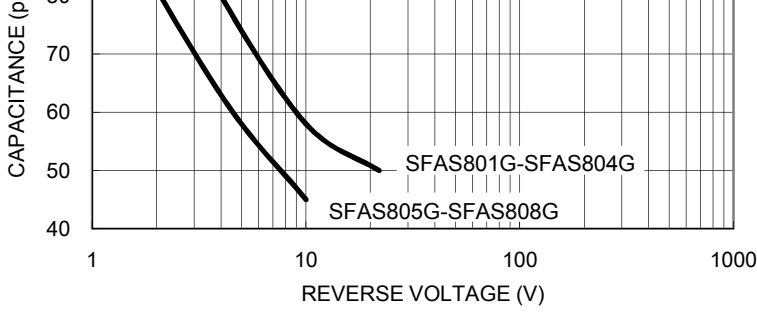
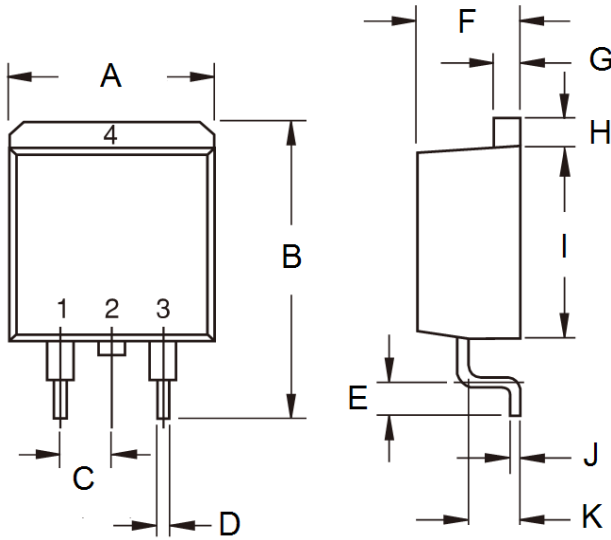


FIG. 5 TYPICAL FORWARD CHARACTERISTICS



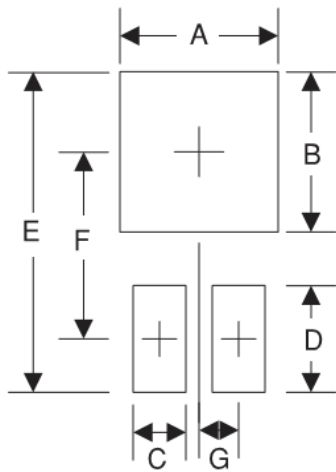


PACKAGE OUTLINE DIMENSIONS



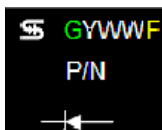
DIM.	Unit (mm)		Unit (in)
	Min	Max	Min
A	-	10.5	-
B	14.60	15.88	0.575
C	2.41	2.67	0.095
D	0.68	0.94	0.027
E	2.29	2.79	0.090
F	4.44	4.70	0.175
G	1.14	1.40	0.045
H	1.14	1.40	0.045
I	8.25	9.25	0.325
J	0.36	0.53	0.014
K	2.03	2.79	0.080

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (in)
A	10.8	0.42
B	8.3	0.32
C	1.1	0.04
D	3.5	0.13
E	16.9	0.66
F	9.5	0.37
G	2.5	0.09

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, of any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to indemnify TSC for any damages resulting from such improper use or sale.

Document Number: DS_D1405074