

- 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



DO-214AB (SMC)

MECHANICAL DATA

Case: DO-214AB (SMC)

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: 0.21 g (approximately)

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

PARAMETER	SYMBOL	SK 52C	SK 53C	SK 54C	SK 55C	SK 56C	SK 59C	SK 510C	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	90	100	
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	63	70	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	90	100	
Maximum average forward rectified current	I _{F(AV)}	5							
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	120							
Maximum instantaneous forward voltage (Note 1) I _F = 5 A	V _F	0.55		0.75		0.85			
Maximum reverse current @ rated VR T _J =25 °C T _J =100°C T _J =125 °C	I _R	0.5					0		
		20		10		-			
		-		-		5			
Voltage rate of change (Rated V _R)	dV/dt	10000							
Typical thermal resistance	R _{θJL}	17							
	R _{θJA}	50							
Operating junction temperature range	T _J	- 55 to +150							
Storage temperature range	T _{STG}	- 55 to +150							

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

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EXAMPLE					
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DE
SK56C R7	SK56C		R7		
SK56C R7G	SK56C		R7	G	Gre
SK56CHR7	SK56C	H	R7		AEC-

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

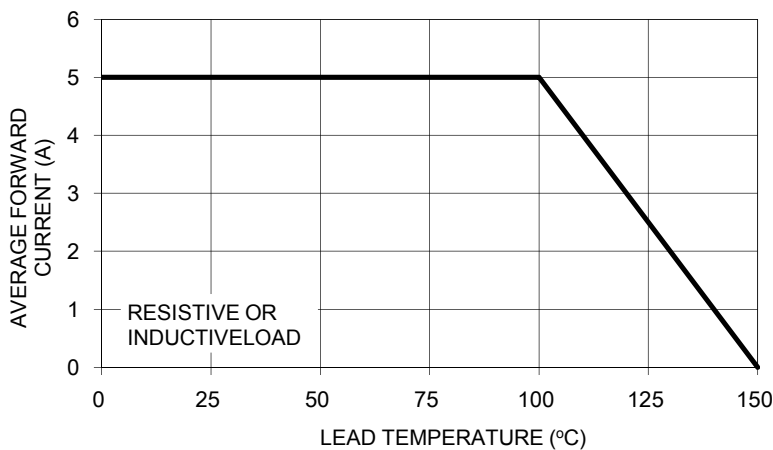


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

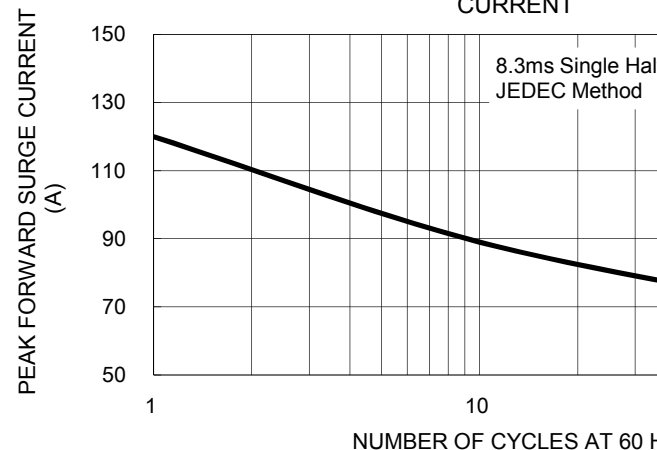


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

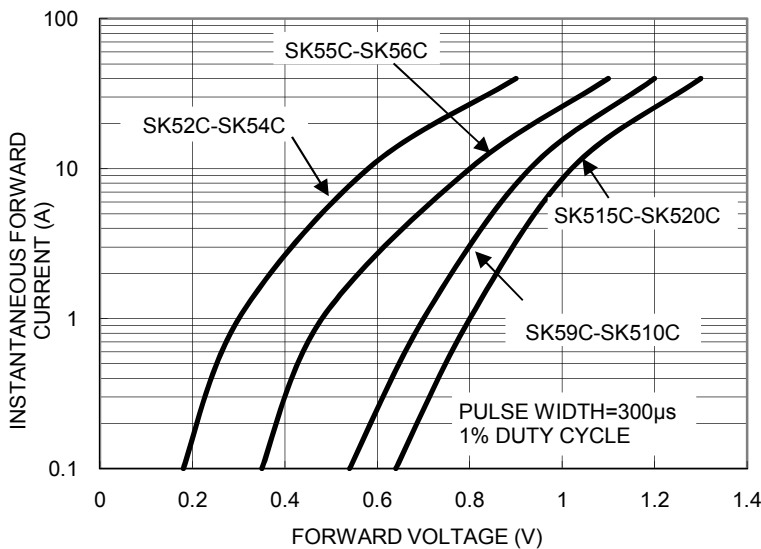
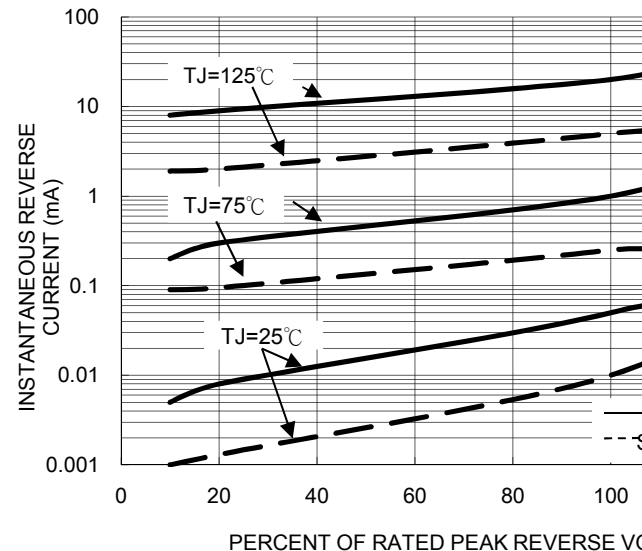
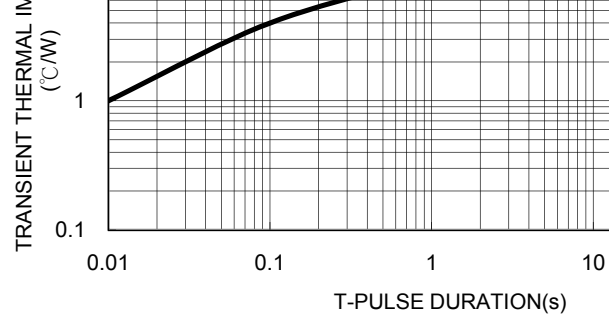
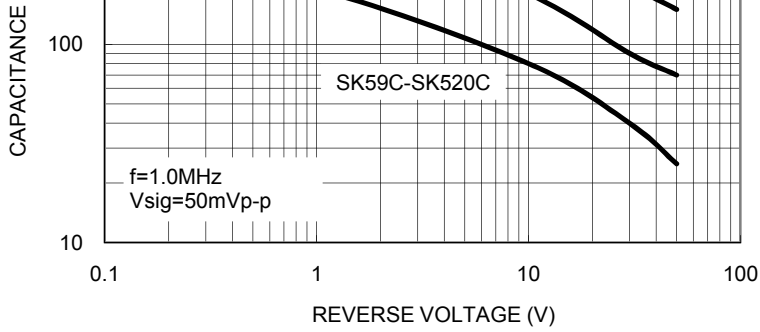
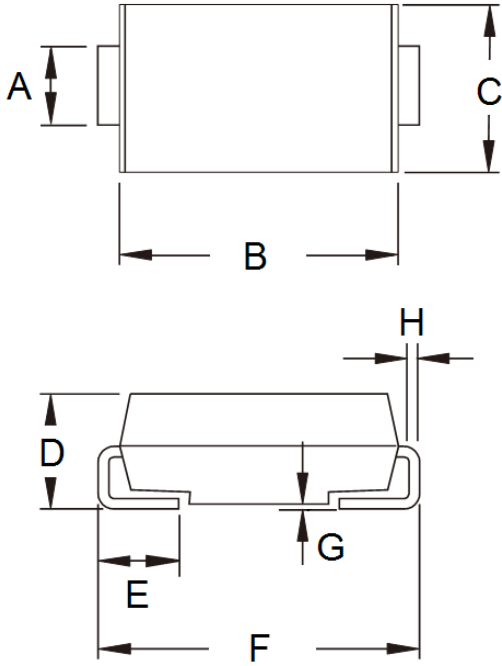


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



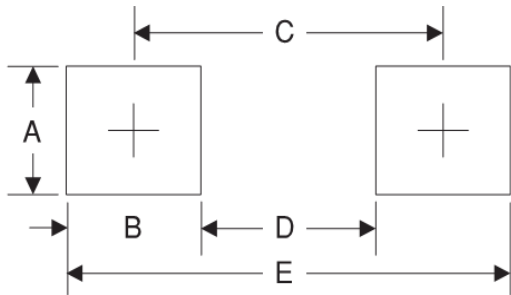


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.90	3.20	0.114	0.126
B	6.60	7.11	0.260	0.280
C	5.59	6.22	0.220	0.245
D	2.00	2.62	0.079	0.103
E	1.00	1.60	0.039	0.063
F	7.75	8.13	0.305	0.320
G	0.10	0.20	0.004	0.008
H	0.15	0.31	0.006	0.012

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	3.3	0.130
B	2.5	0.098
C	6.8	0.268
D	4.4	0.173
E	9.4	0.370

MARKING DIAGRAM



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

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