SKL22C THRU SKL220C

2A Surface Mount Schottky Barrier Rectifiers

■ Features

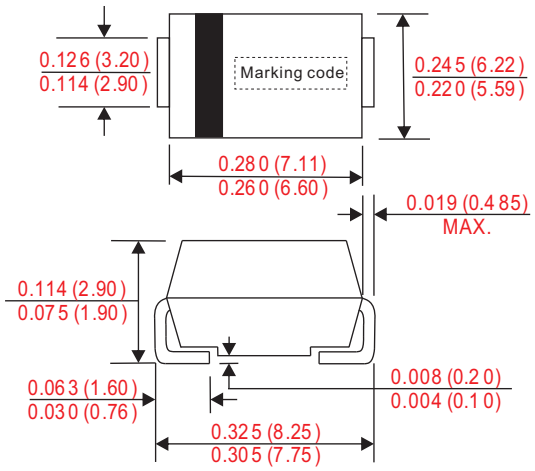
- Electrostatic discharge (ESD) test under IEC6100-4-2 standard >16KV(SKL22C~SKL26C). standard >10KV(SKL210C~SKL220C).
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Suffix "G" indicates Halogen-free part, ex.SKL22CG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AB / SMC
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.007 ounce, 0.226 gram

■ Outline

SMC(DO-214AB)



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating 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	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_O			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			70	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25°C$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100°C$				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		30		pF
Thermal resistance	Junction to ambient	$R_{\theta JA}$		50		°C/W
Storage temperature		T_{STG}	-55		+175	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @2A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
SKL22C	KL22	20	14	20	0.40	-50 ~ +150
SKL24C	KL24	40	28	40	0.45	
SKL26C	KL26	60	42	60	0.55	
SKL210C	KL210	100	70	100	0.75	
SKL215C	KL215	150	105	150	0.82	-50 ~ +175
SKL220C	KL220	200	140	200	0.85	

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

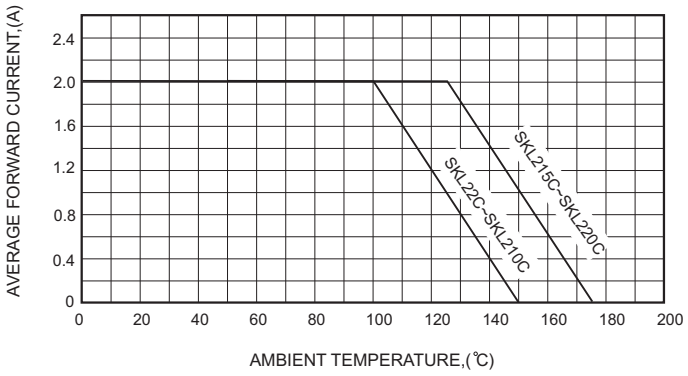


FIG.2-TYPICAL FORWARD CHARACTERISTICS

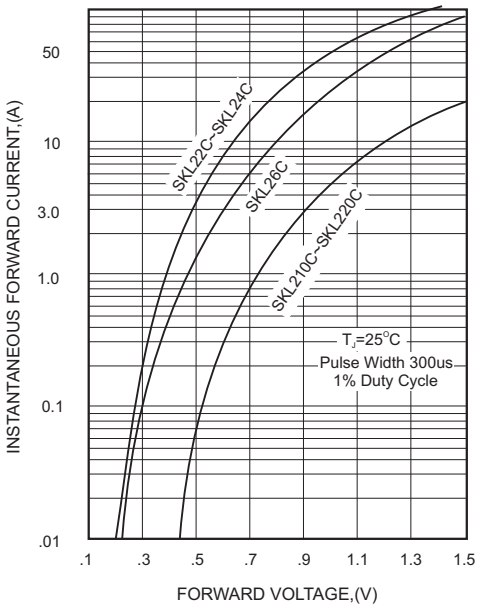


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

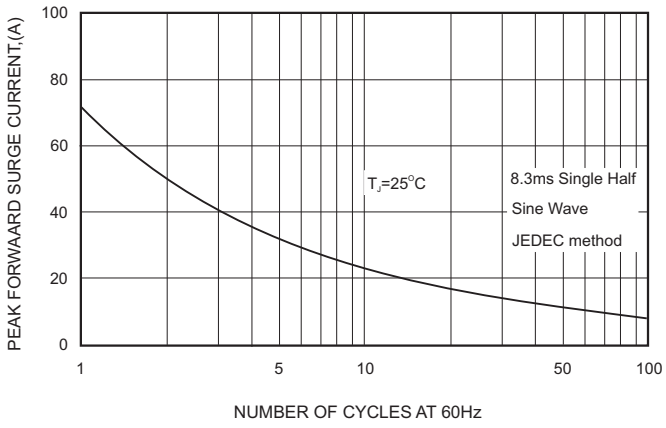


FIG.4-TYPICAL JUNCTION CAPACITANCE

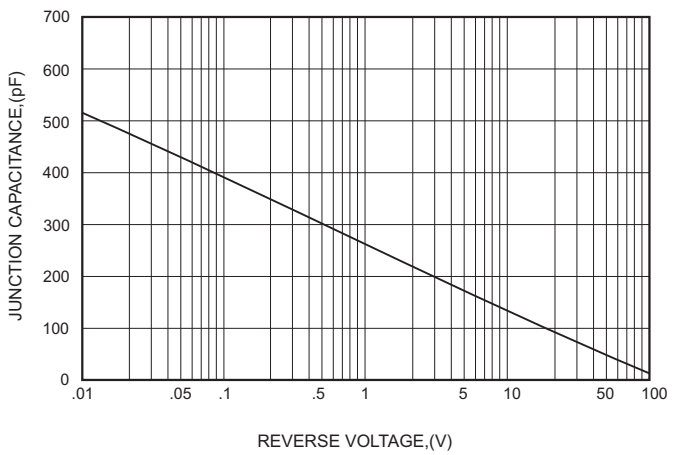
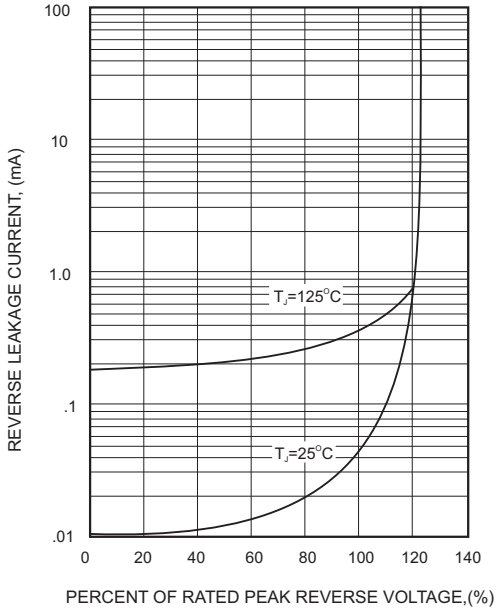


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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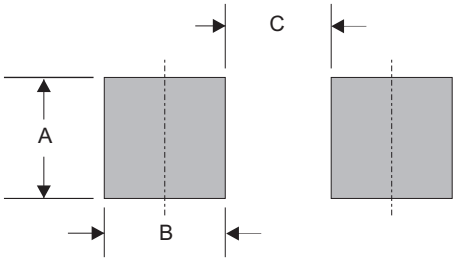
■ SMC foot print



A	B	C
0.132 (3.30)	0.098 (2.50)	0.176 (4.40)

Dimensions in inches and (millimeters)

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