

■ Features

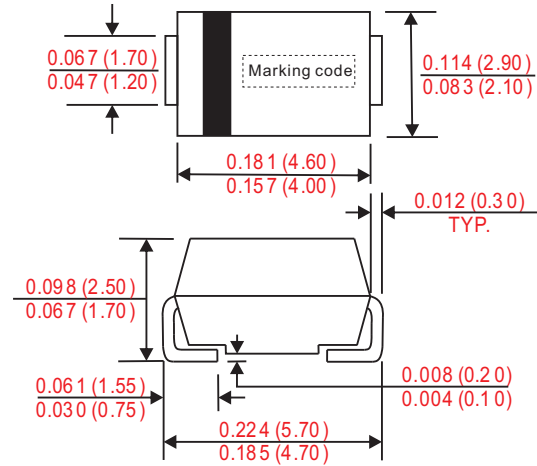
- Electrostatic discharge (ESD) test under IEC6100-4-2 standard >16KV(SS32AL~SS36AL). standard >10KV(SS310AL~SS320AL).
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction. Suffix "H" indicates Halogen-free part, ex.SS32ALH. Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.002 ounce, 0.055 gram

■ Outline

SMA(DO-214AC)



■ 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			3.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			125	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_j		250		pF
Thermal resistance	Junction to ambient	$R_{\theta JA}$		55		°C/W
Storage temperature		T_{STG}	-55		+175	°C

Symbol	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @3A, $T_A = 25^\circ\text{C}$ V_F (V)	Operating temperature T_J (°C)
SS32AL	20	14	20	0.40	-55 ~ +150
SS34AL	40	28	40	0.45	
SS36AL	60	42	60	0.55	
SS310AL	100	70	100	0.72	
SS315AL	150	105	150	0.82	-55 ~ +175
SS320AL	200	140	200	0.85	

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

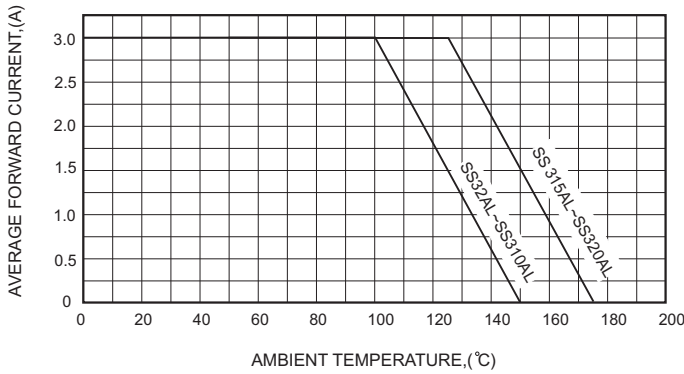


FIG.2-TYPICAL FORWARD CHARACTERISTICS

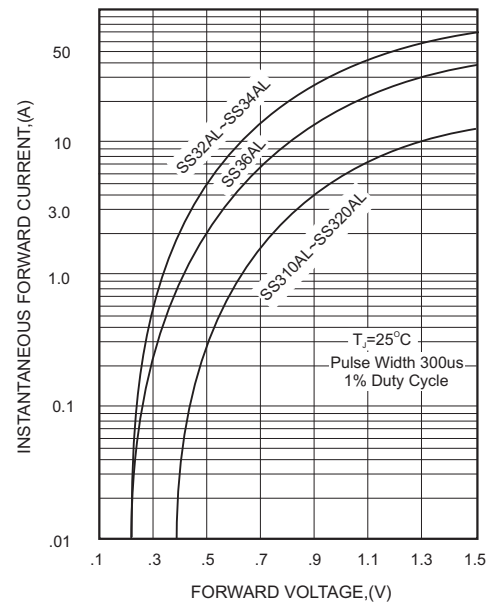


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

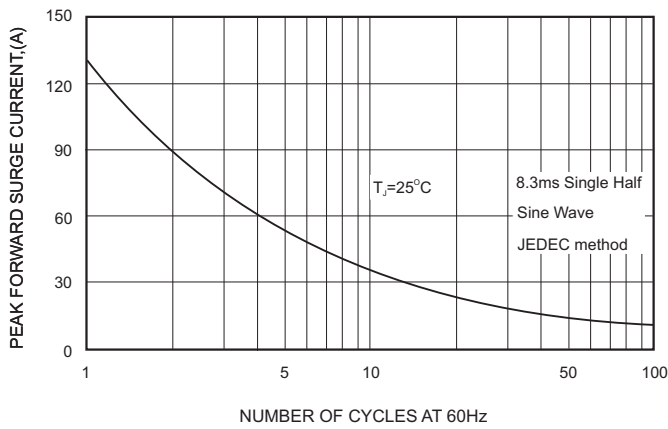


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

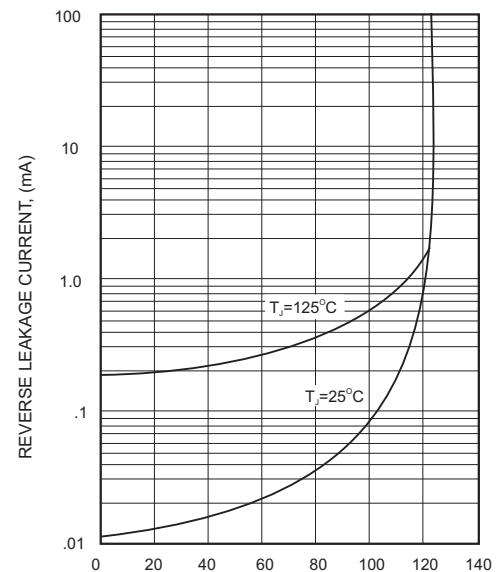
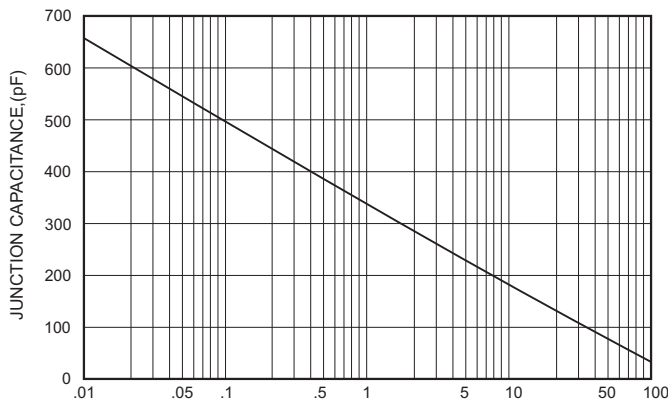
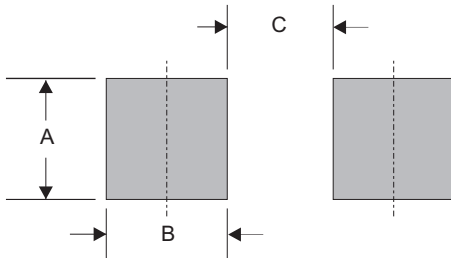


FIG.4-TYPICAL JUNCTION CAPACITANCE



■ SMA foot print



A	B	C
0.068 (1.70)	0.104 (2.60)	0.060 (1.50)

Dimensions in inches and (millimeters)

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00