

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SS52C--SS510C

FEATURES

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- High surge capability
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- Guarding for over voltage protection
- Plastic package has Underwriters Laborator Flammability Classification 94V-0
- High temperature soldering guaranteed:250°C/10 seconds at terminals



Lead-free



SMC (DO-214AB)

MECHANICAL DATA

- Case: SMC molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS59C	SS510C	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average for word rectified current at TL(SEEFIG.1) (NOTE1)	$I_{F(AV)}$	5.0								A
Peak forward surge current 8.3ms single half-sine-wave (JEDEC Method)	I_{FSM}	175								A

Thermal Characteristics

Characteristic	Symbol	SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS59C	SS510C	UNITS	
Maximum thermal resistance (NOTE1)	$R_{\theta JA}$	55								°C/W	
	$R_{\theta JL}$	17									
Operating temperature range	T_J	-55-----+125					-55-----+150				°C
Storage temperature range	T_{STG}	-55-----+150								°C	

Electrical Characteristics (@TA = 25°C unless otherwise specified)

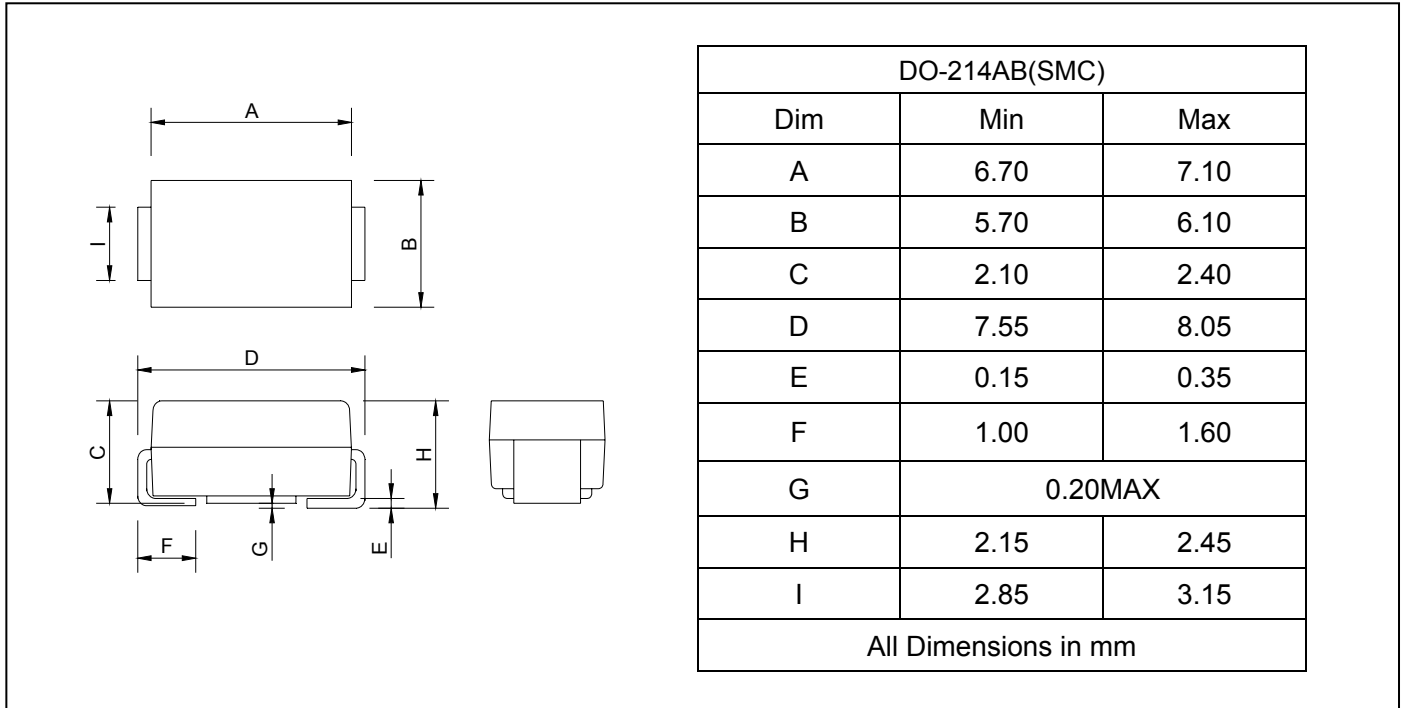
Characteristic	Symbol	SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS59C	SS510C	UNITS
Maximum instantaneous forward voltage at 5.0	V_F	0.55			0.75		0.85			V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.5								mA
		20					10			

Note: 1. P.C.B. mounted with 0.55*X0.55"(14.0X14.0mm²) copper pad areas

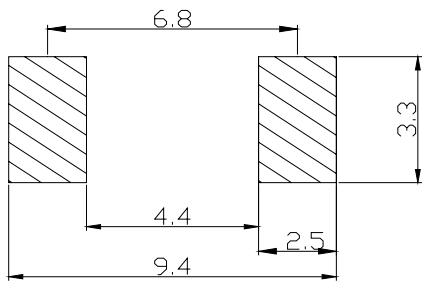
**SURFACE MOUNT SCHOTTKY
BARRIER RECTIFIERS**

SS52C--SS510C

PACKAGE OUTLINE DIMENSIONS



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
SS52C--SS510C	DO-214AB(SMC)	3000/Tape&Reel

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BARRIER RECTIFIERS**

SS52C--SS510C

FIG.1 – FORWARD DERATING CURVE

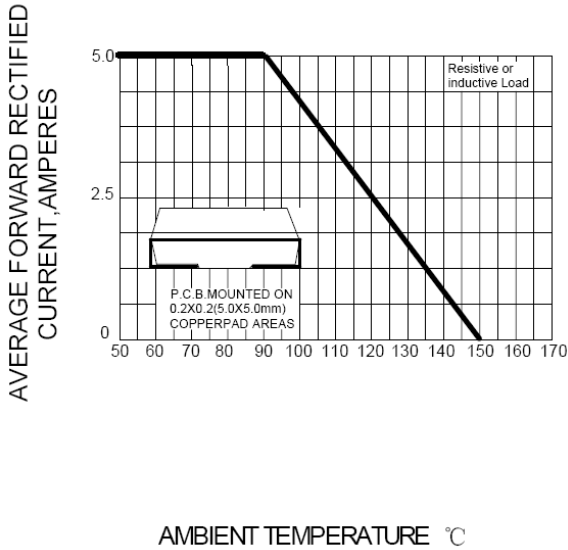


FIG.2- PEAK FORWARD SURGE CURRENT

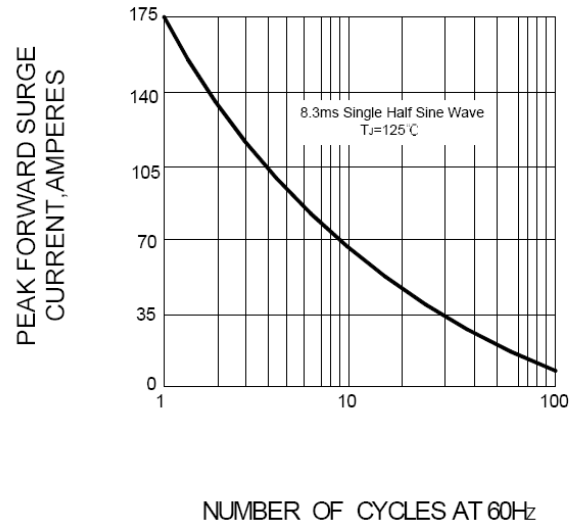


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

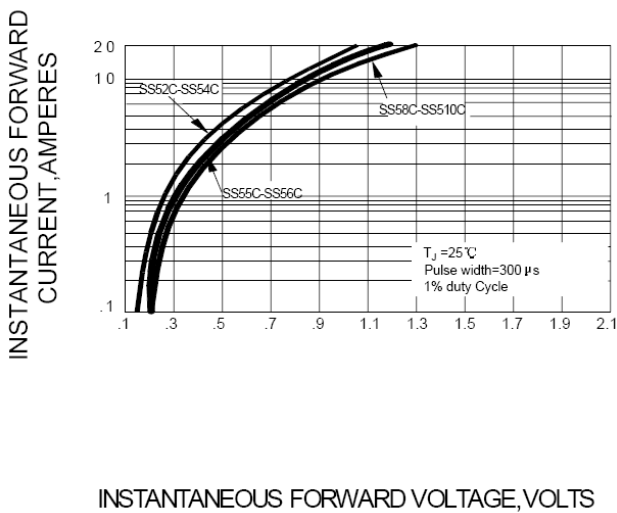


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

