BL GALAXY ELECTRICAL

SS52C---SS510C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 --- 100 V
CURRENT: 5.0 A

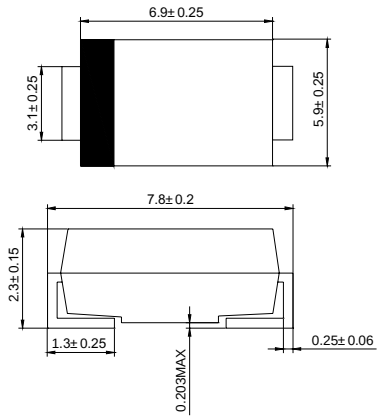
FEATURES

- ◇ Plastic package has Underwriters Laborator Flammability Classification 94V-0
- ◇ For surface mounted applications
- ◇ Low profile package
- ◇ Built-in strain relief
- ◇ Metal silicon junction, majority carrier conduction
- ◇ High surge capability
- ◇ High current capability,low forward voltage drop
- ◇ Low power loss,high effciency
- ◇ For use in low voltage high frequency inverters,free wheeling and polarity protection applications
- ◇ Guardring for overvoltage protection
- ◇ High temperature soldering guaranteed:250°C/10 seconds at terminals

MECHANICAL DATA

- ◇ Case:JEDEC SMC,molded plastic over passivated chip
- ◇ Terminals:Solder Plated, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.007 ounces, 0.21 gram

SMC



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS59C	SS510C	UNITS
Maximum recurrent 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 forw ord rectified current at T_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	5.0								A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load(JEDEC Method)	I_{FSM}	175								A
Maximum instantaneous forw ard voltage at 5.0A(NOTE.1)	V_F	0.55			0.70		0.85			V
Maximum DC reverse current @T_A=25°C	I_R	0.5								mA
at rated DC blockjing voltage(NOTE1) @T_A=100°C		20					10			
Typical thermal resitance (NOTE2)	$R_{\theta JA}$ $R_{\theta JL}$	55 17								°C/W
Operating junction temperature range	T_J	-55--- +150								°C
Storage temperature range	T_{STG}	-55--- +150								°C

NOTE: 1.Pulse test:300 μS pulse width,1%duty cycle
2. P.C.B.mounted with 0.55"X0.55"(14.0X14.0mm²)copper pad areas

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FIG.1 – FORWARD DERATING CURVE

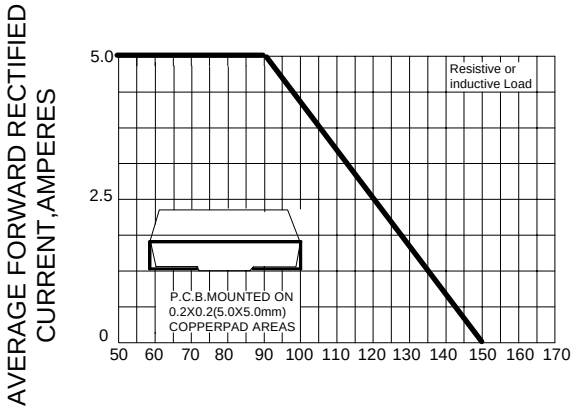

FIG.2-- PEAK FORWARD SURGE CURRENT

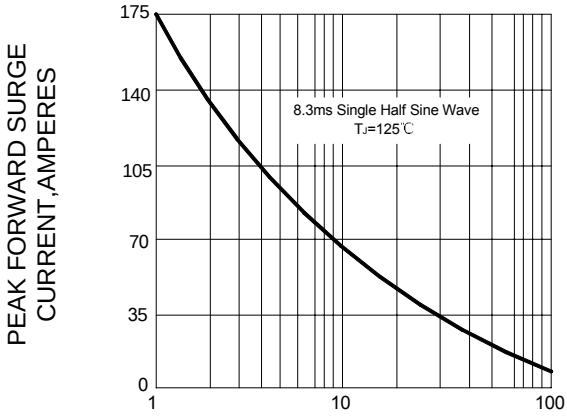

FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

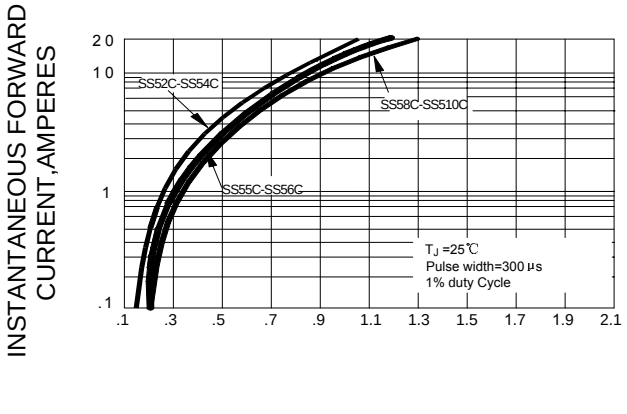

FIG.4 – TYPICAL REVERSE CHARACTERISTICS