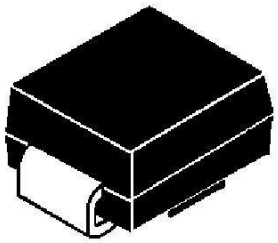
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Features

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed : 250℃/10 seconds at terminals



SMC (DO-214 AB)

Mechanical Date

- Case : JEDEC SMC(DO-214AB) molded plastic body
- Terminals : Solder Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram

Major Ratings and Characteristics

$I_{F(AV)}$	3.0A
V_{RRM}	20 V to 200 V
I_{FSM}	100A / 70A
V_F	0.50V, 0.75V, 0.85V, 0.95V
T_J max.	150 °C

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Type Number		Symbol	SS 32C	SS 33C	SS 34C	SS 35C	SS 36C	SS 39C	SS 310C	SS 315C	SS 320C	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	30	40	50	60	90	100	150	200	V
Maximum RMS Voltage		V_{RMS}	14	21	28	35	42	63	70	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	30	40	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	3.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine- wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	100			70						A
Maximum Instantaneous Forward Voltage (Note 1) @ 3.0A	T_A=25℃ T_A=100℃	V_F	0.5 0.4			0.75 0.65		0.85 0.70		0.95 0.80		V
Maximum Reverse Current @ Rated V_R	T_A=25℃	I_R	0.5					0.1				mA
	T_A=100℃		10			5		-				
	T_A=125℃		-					0.5				
Typical Thermal Resistance		$R_{\theta jL}$ $R_{\theta jA}$	17 55									℃/W
Operating Temperature Range		T_J	- 55 to + 125			- 55 to + 150						℃
Storage Temperature Range		T_{STG}	- 55 to + 150									℃

Ratings And Characteristic Curves (T_A=25 ℃ unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

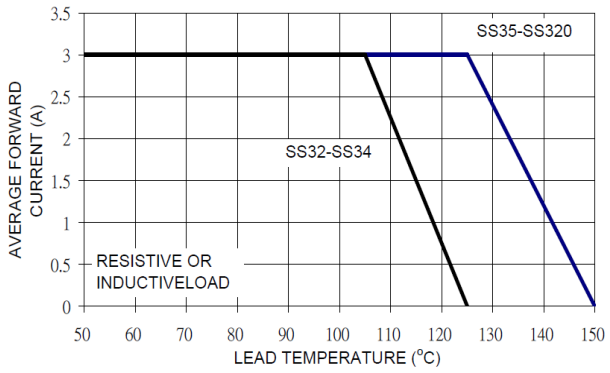


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

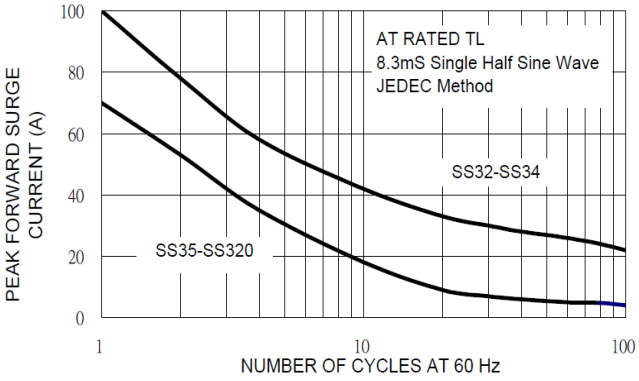


FIG. 3 TYPICAL FORWARD CHARACTERISRICS

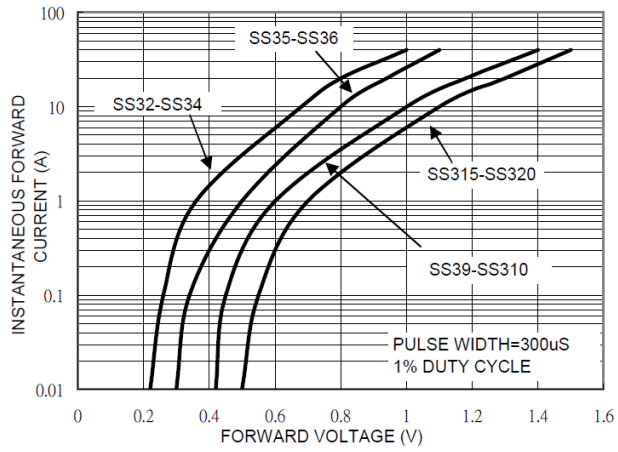


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

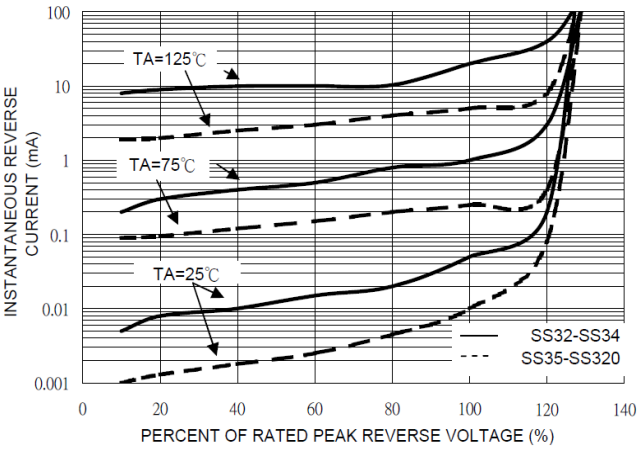


FIG. 5 TYPICAL JUNCTION CAPACITANCE

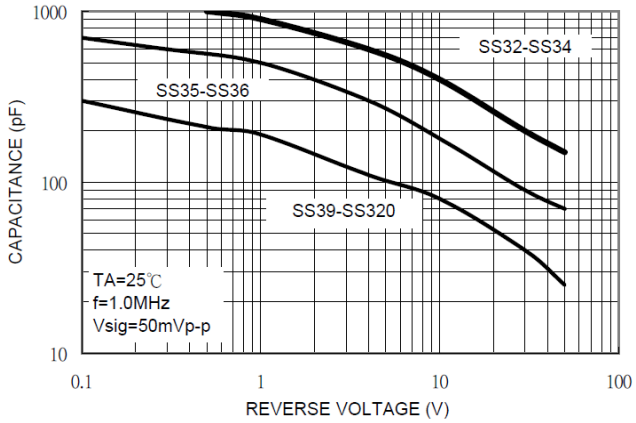
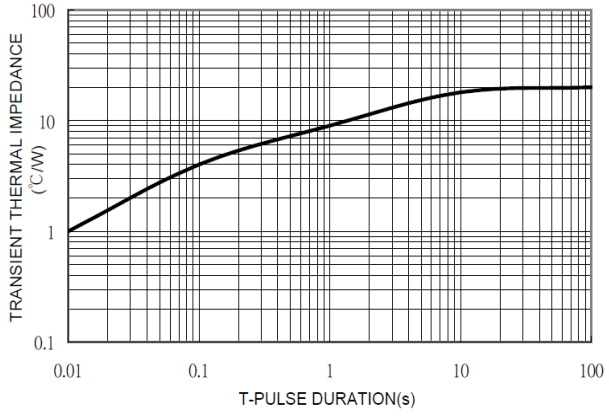
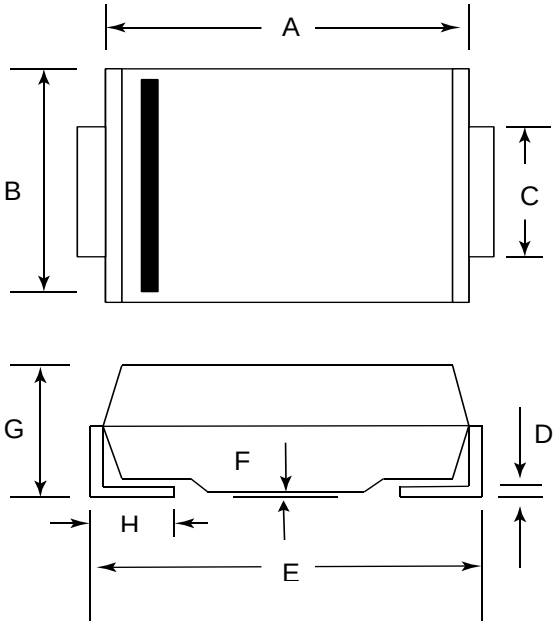


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

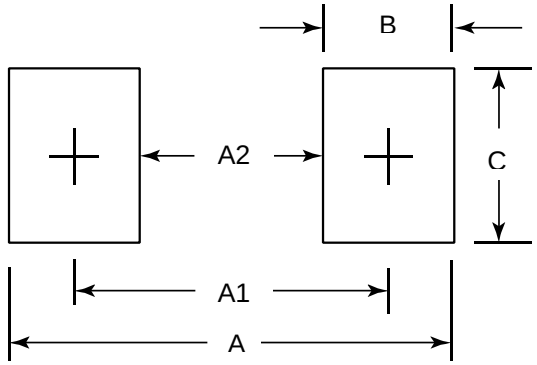


SMC Package Dimensions



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	6.60	7.11	0.260	0.280
B	5.59	6.22	0.220	0.245
C	2.90	3.20	0.114	0.126
D	0.152	0.305	0.006	0.012
E	7.75	8.13	0.305	0.320
F	----	0.203	----	0.008
G	2.06	2.62	0.081	0.103
H	0.76	1.52	0.030	0.060

Suggested Land Pattern



DIM	Millimeters
A	9.4
A1	6.9
A2	4.4
B	2.5
C	3.3