

Features

- For surface mount applications
- High forward surge current capability
- Low power loss
- High efficiency
- Metal silicon junction, majority carriers conduction

SMC



1.Cathode  2.Anode

Marking Code :

SS52C-TN: SS52
SS54C-TN: SS54
SS56C-TN: SS56
SS58C-TN: SS58
SS510C-TN: SS510
SS512C-TN: SS512
SS515C-TN: SS515
SS520C-TN: SS520

Maximum Ratings and Electrical Characteristics

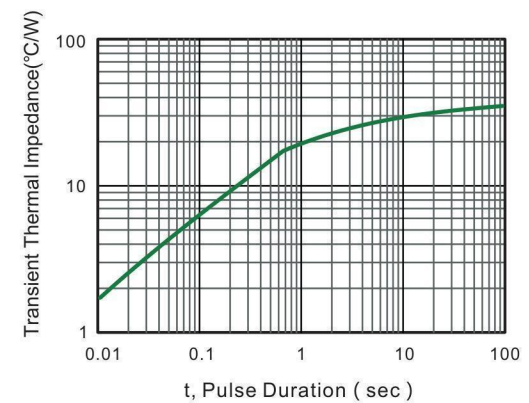
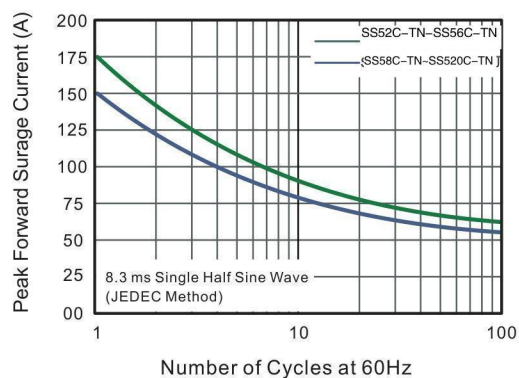
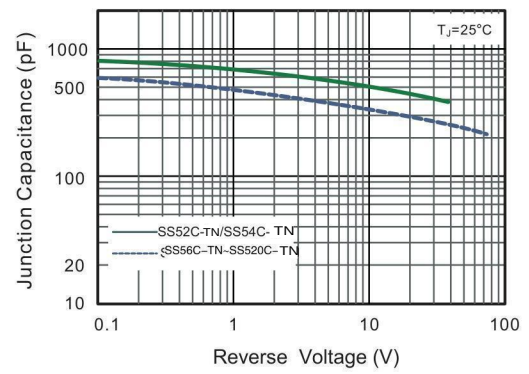
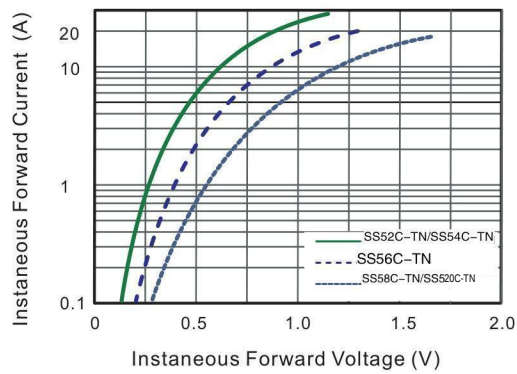
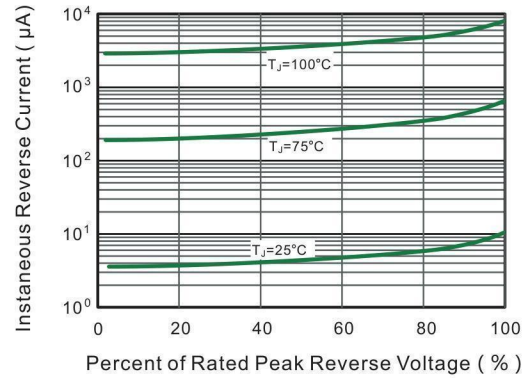
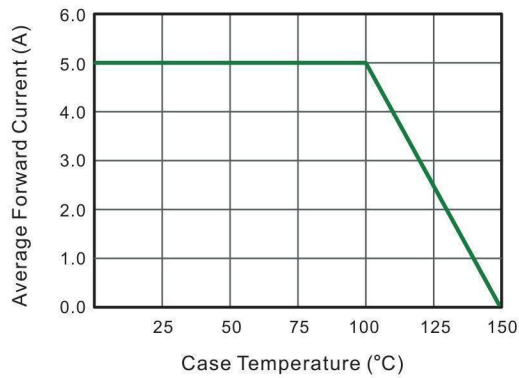
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	SS52C –TN	SS54C –TN	SS56C –TN	SS58C –TN	SS510C –TN	SS512C –TN	SS515C –TN	SS520C –TN	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	5.0								A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC method)	I _{FSM}	175			150					A
Maximum Instantaneous Forward Voltage at 5 A	V _F	0.55		0.70	0.85					V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _A = 25 °C T _A = 100 °C	I _R	1.0 50								mA
Typical Junction Capacitance ^{Note1}	C _J	600		400						pF
Typical Thermal Resistance ^{Note2}	R _{θJA}	35								°C/W
Junction Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

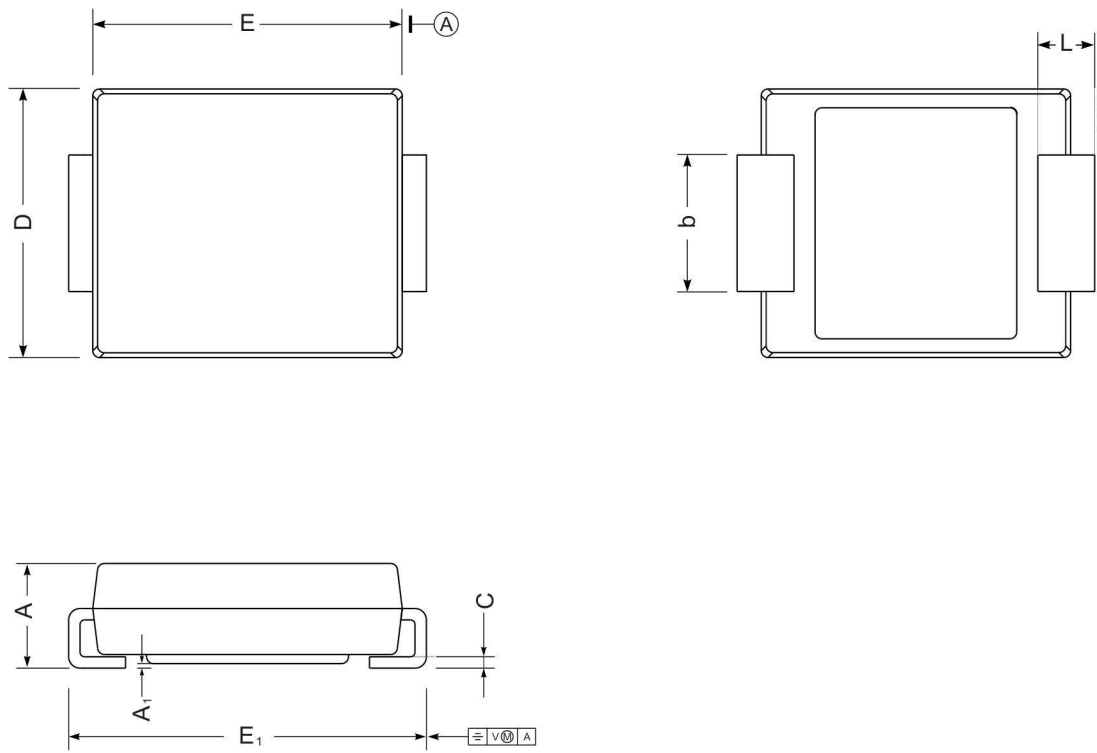
Typical Characteristic Curves



Package Outline

SMC

Dimensions in mm



UNIT		A	E	D	E ₁	A ₁	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108