

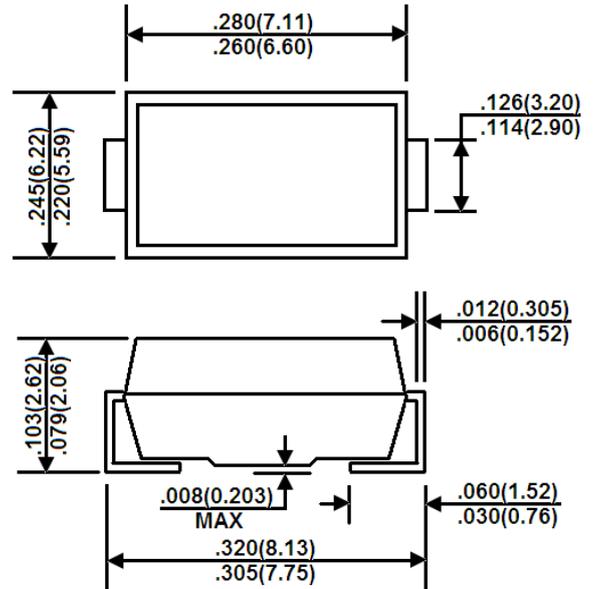
Features

- * Low power loss, high efficiency
- * Ideal for automated placement
- * Guardring for overvoltage protection
- * High surge current capability
- * High temperature soldering guaranteed:
260°C/10 seconds at terminals



Package Outline Dimensions in inches (millimeters)

SMC:



Mechanical Data

- * Case: JEDEC DO-214AB molded plastic body
- * Terminals: leads solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	SS 52C	SS 53C	SS 54C	SS 55C	SS 56	SS 58C	SS 510C	SS 515C	SS 520C	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum D.C Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0									A	
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	120									A	
Maximum Instantaneous Forward Voltage at 5.0A (Note1)	V_F	0.55			0.75		0.85		0.95		V	
Maximum Reverse Current @ Rated V_R $T_J=25^\circ C$ $T_J=100^\circ C$ $T_J=125^\circ C$	I_R	0.5					0.3					mA
		20			10		-					
		-			-		5					
Typical Junction Capacitance(Note2)	C_J	500			300						pF	
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	50									°C/W	
Operating junction temperature range	T_J	-55 to +125				-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150									°C	

NOTE: 1、 Pulse test with PW=300μs, 1% duty cycle

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

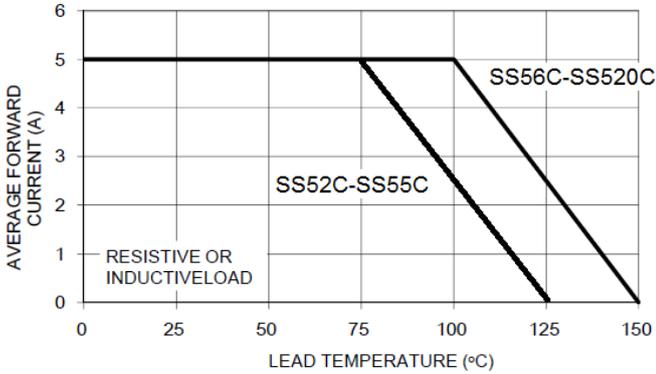


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

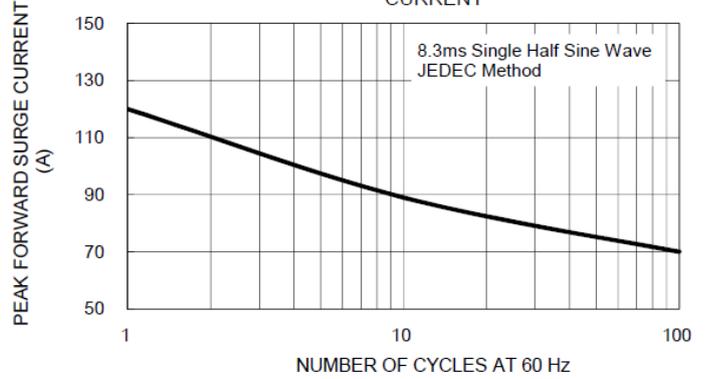


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

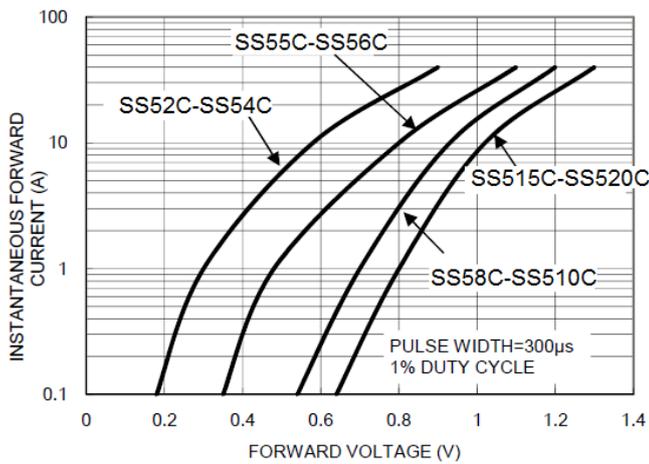


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

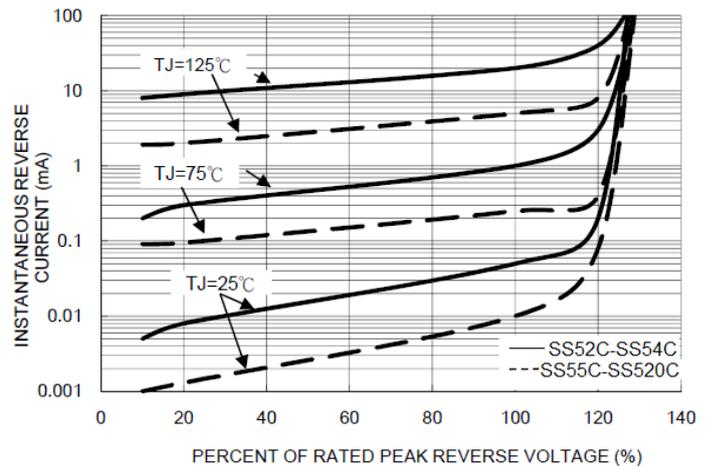


FIG. 5 TYPICAL JUNCTION CAPACITANCE

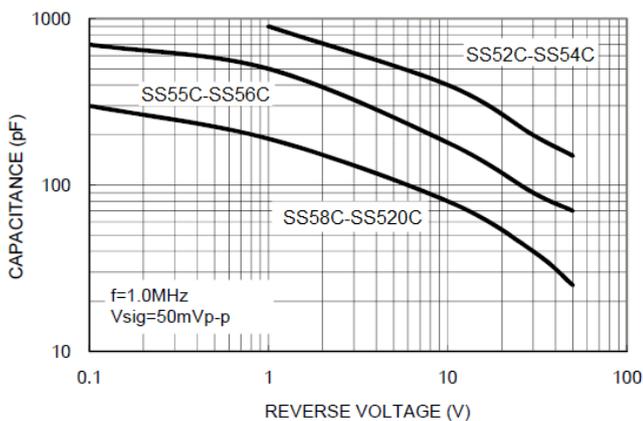
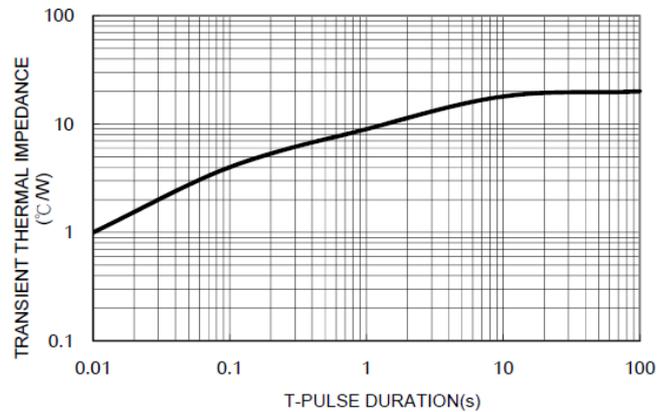


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE





SS52C THRU SS520C

5.0 Amps. Surface Mount Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing
SS52C~SS520C	SMC	3K/Reel