

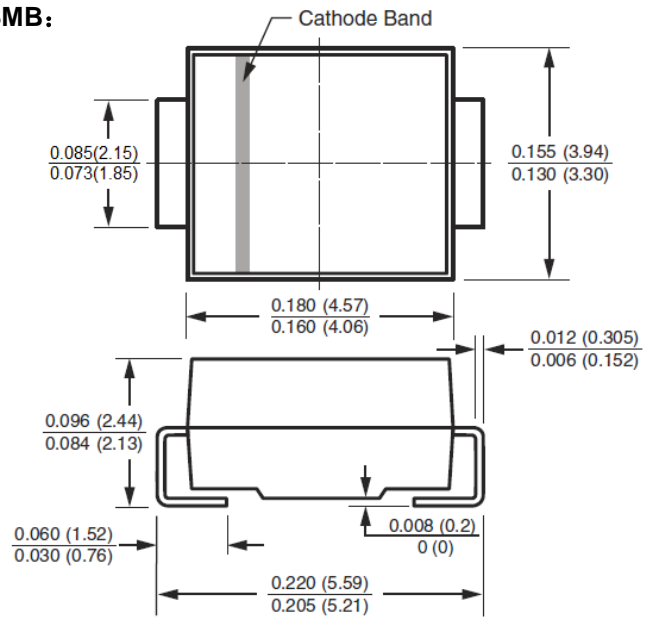
Features

- * The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * Built-in strain relief, ideal for automated placement
- * High forward surge current capability
- * High temperature soldering guaranteed:
260°C/10 seconds at terminals



Package Outline Dimensions in inches (millimeters)

SMB:



Mechanical Data

- * Case: JEDEC DO-214AA 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 52B	SS 53B	SS 54B	SS 55B	SS 56B	SS 58B	SS 510B	SS 515B	SS 520B	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	I_R	0.5				0.3				mA	
		20		10		-					
		-				5					
Voltage Rate of Change(Rated V_R)	dV/dt	10000									V/ μ s
Typical junction capacitance(Note2)	C_J	200									pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	60									°C/W
	$R_{\theta JC}$	23									
	$R_{\theta JL}$	19									
Operating Junction Temperature Range	T_J	-55 to +150									°C
Storage Temperature Range	T_{STG}	-55 to +150									°C

Note: 1、 Pulse test: $t_p=300 \mu$ S, 1% duty cycle 2、 Measured at 1MHz and applied reverse voltage of 4.0V D.C. 3、 P.C.B. mounted with 0.4x0.4"(10x10mm) copper pad areas

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

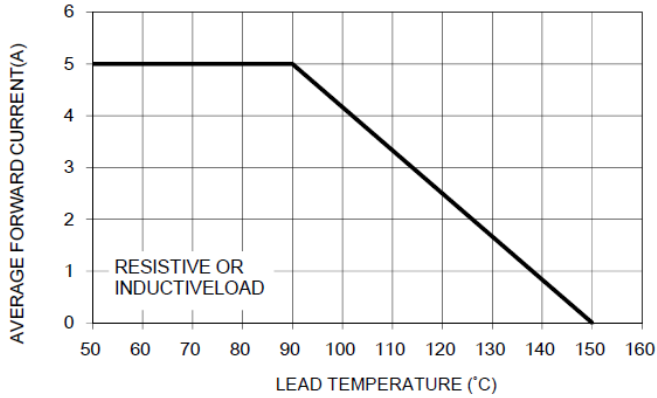


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

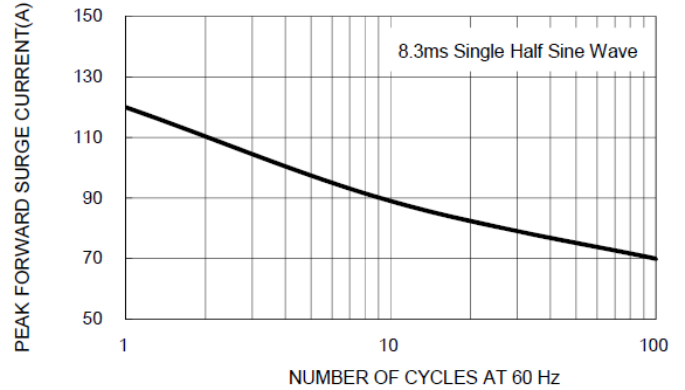


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

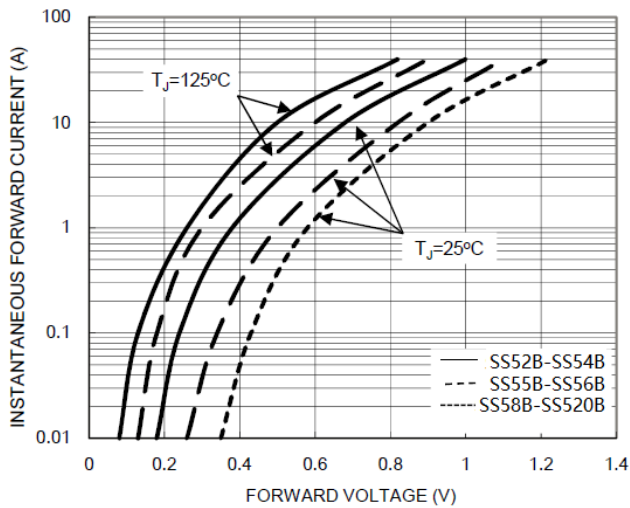


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

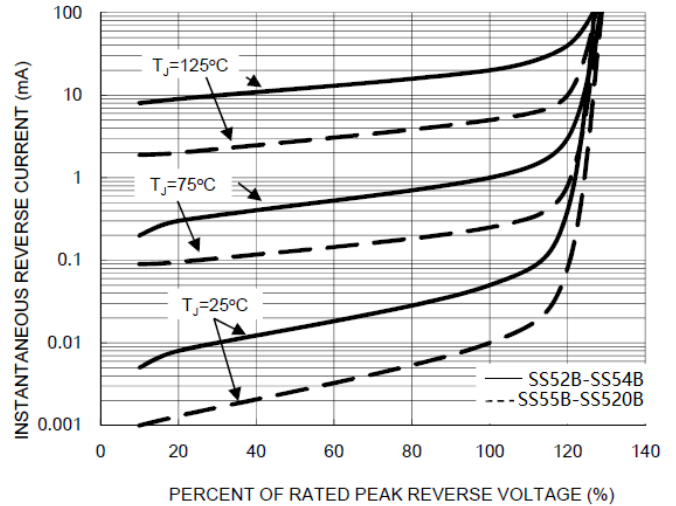


FIG. 5 TYPICAL JUNCTION CAPACITANCE

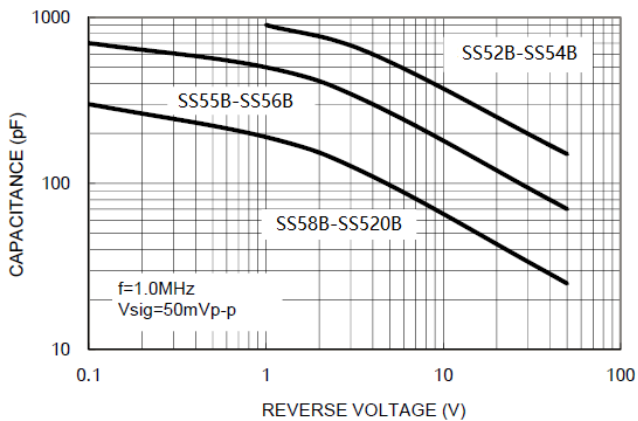
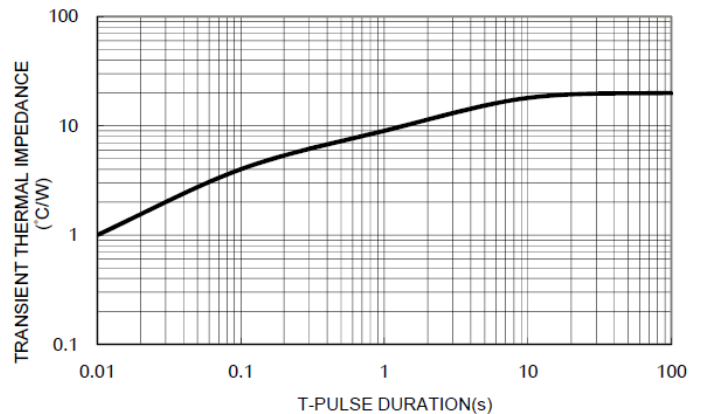


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE





SS52B THRU SS520B
5.0 Amps. Surface Mount Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing
SS52B~SS520B	SMB	3K/Reel