

Features

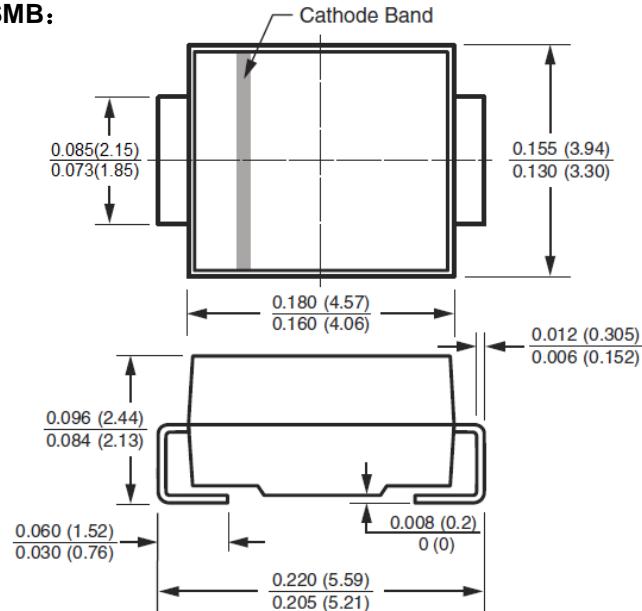
- * The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * Built-in strain relief, ideal for automated placement
- * High forward surge current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



RoHS
COMPLIANT

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 T _J =25°C T _J =100°C T _J =125°C	I _R			0.5				0.3			mA
			20		10			-			
			-					5			
Voltage Rate of Change(Rated V _R)	dV/dt					10000					V/μs
Typical junction capacitance(Note2)	C _J					200					pF
Typical Thermal Resistance(Note3)		R _{θJA}				60					°C/W
		R _{θJC}				23					
		R _{θJL}				19					
Operating Junction Temperature Range	T _J				-55 to +150						°C
Storage Temperature Range	T _{STG}				-55 to +150						°C

Note: 1、 Pulse test: tp=300 μ 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

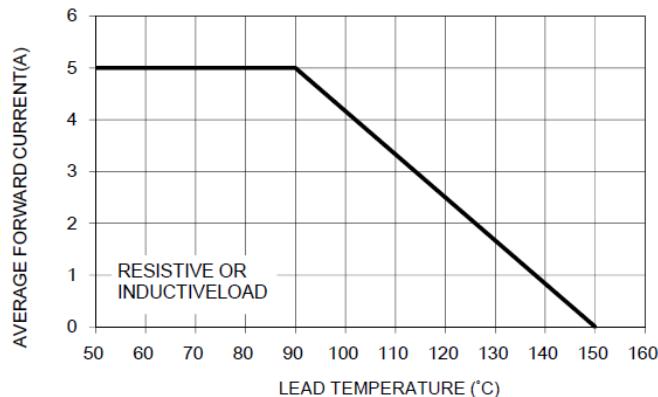


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

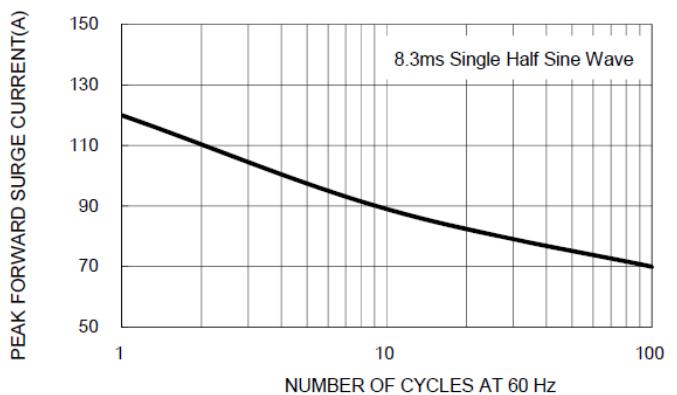


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

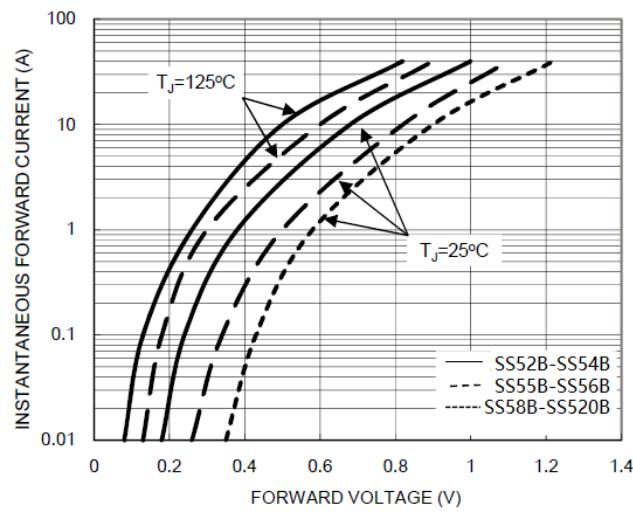


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

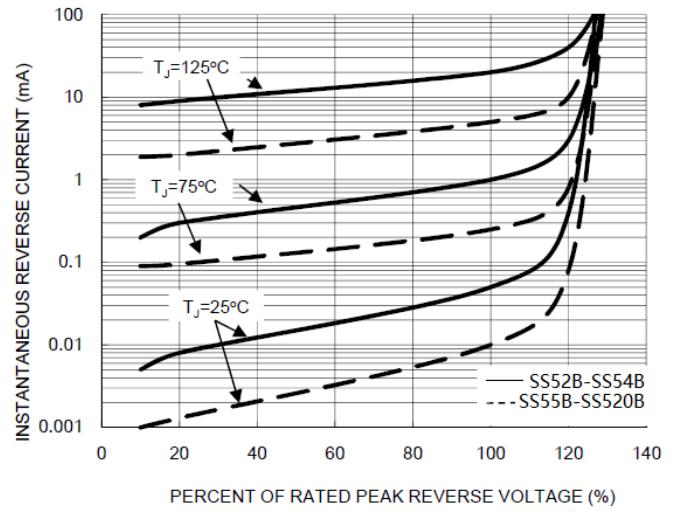


FIG. 5 TYPICAL JUNCTION CAPACITANCE

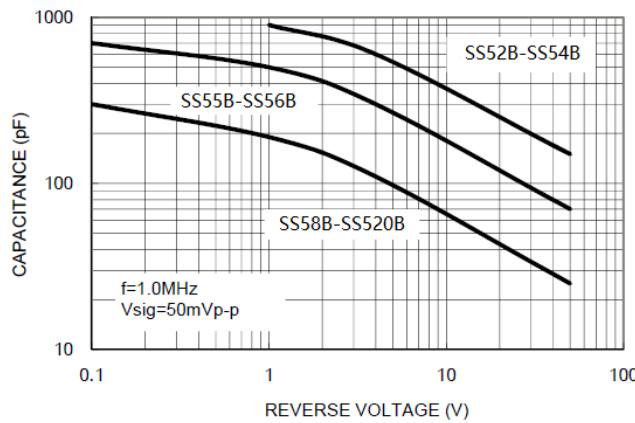
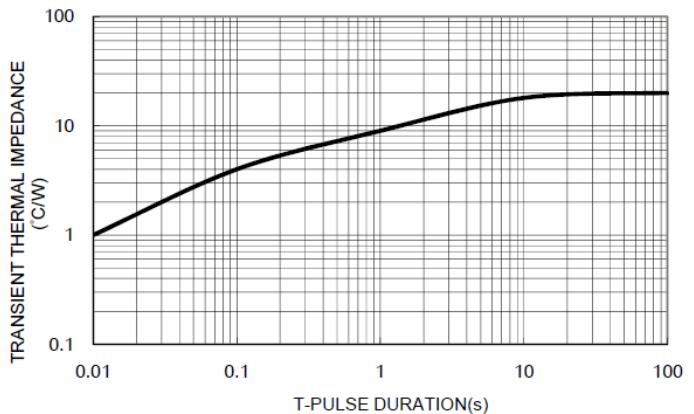


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE





SS52B THRU SS520B
5.0 Amps. Surface Mount Schottky Barrier Rectifiers

Ordering Information

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