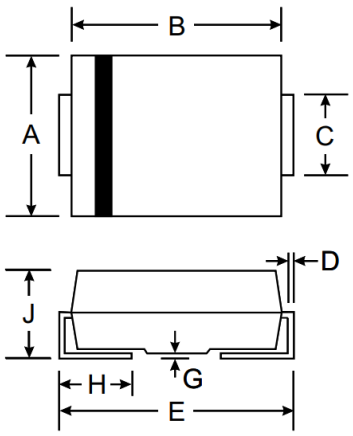
SMD Schottky Barrier Rectifier Diode

Primary characteristics		
Parameter	**Value**	**Unit**
Maximum repetitive peak reverse voltage	20 ~ 100	V
Maximum average forward rectified current	5.0	A

Features

- **SMB (DO-214AA)** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Low power loss, High efficiency
- Surge overload rating to 175A peak
- For use in low voltage application
- Polarity: Cathode band or cathode notch
- Terminals: solder plated, solderable per MIL-STD-750, method 2026

Case dimensions



SMB (DO-214AA)

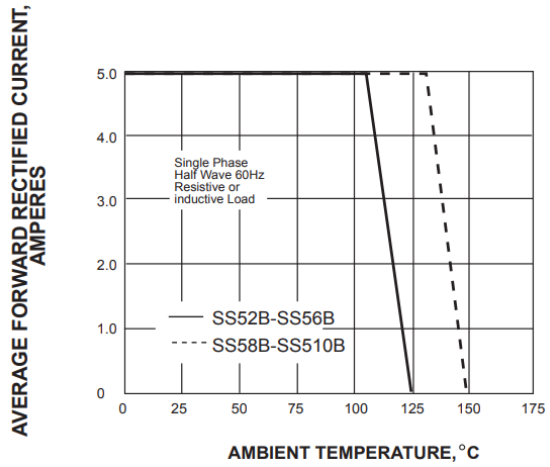
Unit: mm	A	B	C	D	E	G	H	J
Min	3.30	4.06	1.91	0.15	5.00	0.10	0.766	2.00
Max	3.94	4.70	2.21	0.31	5.59	0.20	1.52	2.62

Absolute maximum ratings and general electrical characteristics

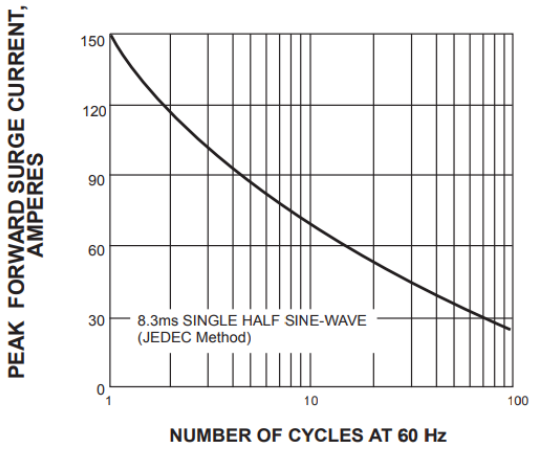
(T_a = 25°C, unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbol	Value							Unit
		SS52B	SS53B	SS54B	SS55B	SS56B	SS58B	SS510B	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	
Maximum average forward rectified current	$I_{(AV)}$	5.0							A
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	120							
Maximum instantaneous forward voltage @5.0A	V_F	0.55			0.7		0.85		V
Maximum DC reverse current at rated DC blocking voltage T_a=25°C	I_R	0.5							mA
Maximum DC reverse current at rated DC blocking voltage T_a=100°C		20					10		
Typical junction capacitance @1.0MHz, V_R=4.0VDC	C_J	200							pF
Typical thermal resistance (P.C.B mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas)	$R_{\theta JA}$	50.0							°C/W
Operating temperature range	T_J	-65 ~ 125					-65 ~ 150		°C
Storage temperature range	T_{STG}	-65 ~ 150							°C

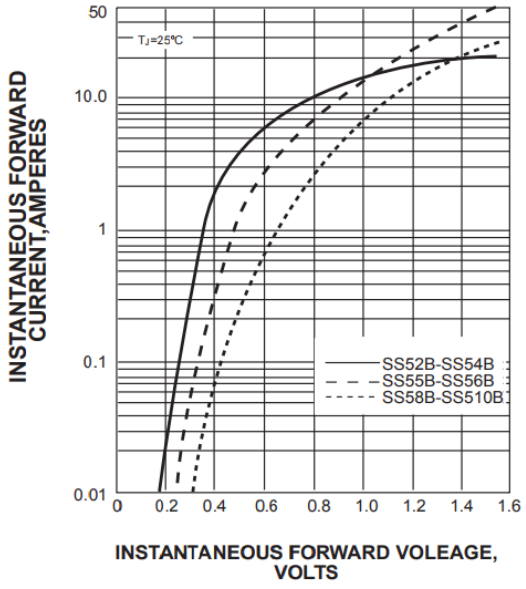
Forward current derating curve



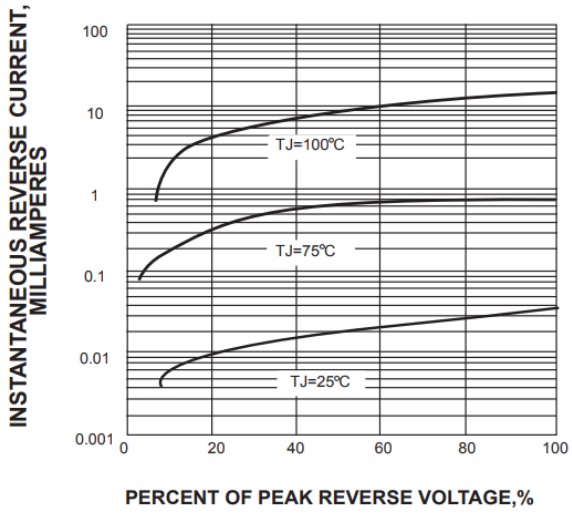
Maximum non-repetitive peak forward surge current



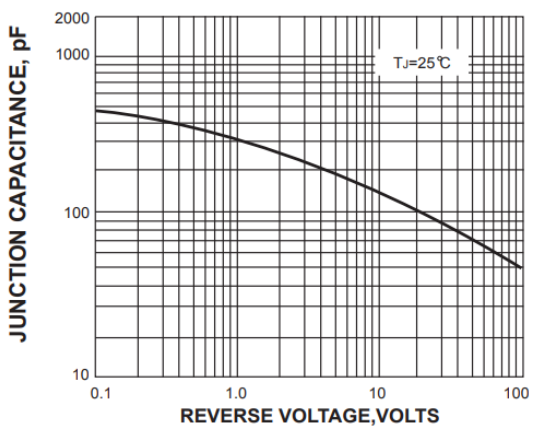
Typical forward characteristics



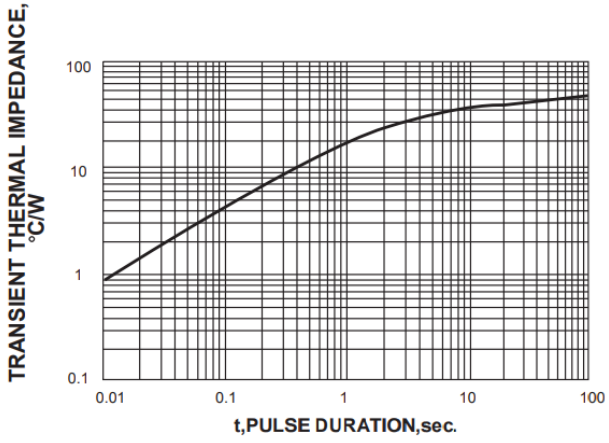
Typical reverse characteristics



Typical junction capacitance



Typical transient thermal impedance



Ordering information			
Part Number	**Package**	**Shipping Quantity**	**Dimensions**
SS52B – SS510B	SMB (DO-214AA)	**3 000 pcs / reel**	---

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