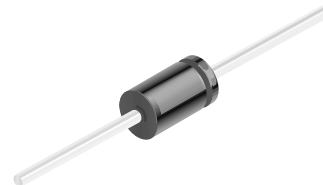


Surface Mount Trench Schottky Rectifier Diode in DO-201AD

Features

- Metal-Semiconductor Junction with guard ring
- Epitaxial Construction
- Low forward voltage drop
- High current capability



Mechanical Data

- **Case:** JEDEC DO-204AC(DO-201AD)molded plastic
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

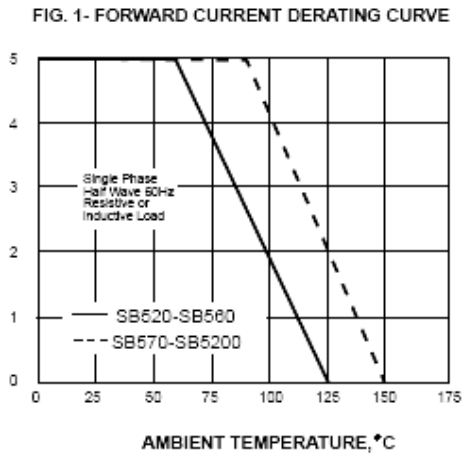
Absolute Maximum Ratings														
Ratings at 25 °C, ambient temperature unless otherwise specified														
Parameter	Symbols	SB 520	SB 530	SB 540	SB 550	SB 560	SB 570	SB 580	SB 590	SB 5100	SB 5150	SB 5200	Units	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	Volts	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	Volts	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	Volts	
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	5.0											Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rates load (JEDEC Method) $T_A=50^\circ\text{C}$	I_{FSM}	150											Amps	
Maximum instantaneous forward voltage @ 5.0A	V_F	0.5		0.7		0.8			0.9			Volts		
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.5										0.2	mA	
		20.0					10.0					2.0		
Typical thermal resistance (Note 2)	$R_{\theta JA}$	25											°C/W	
Operating junction temperature range	T_J	-55 to +125					-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150											°C	

Notes 1:Thermal Resistance Junction to Ambient.

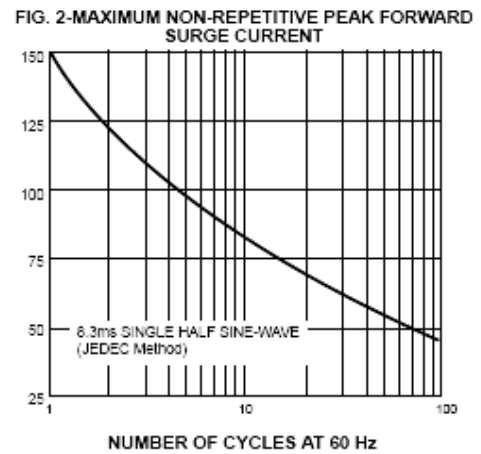
2:Measured at 1.0MHz and applied reverse voltage of 4.0v dc.

Typical Characteristics ($T_{amb} = 25^\circ\text{C}$ unless otherwise specified)

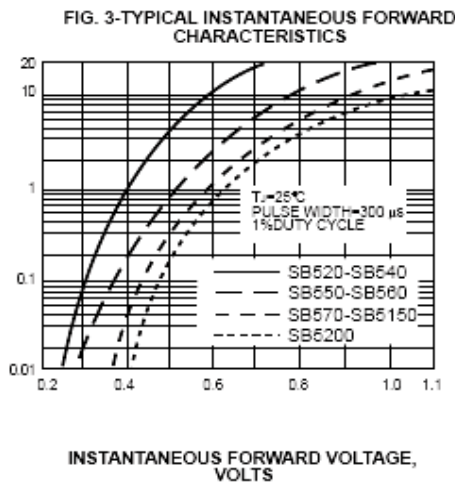
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



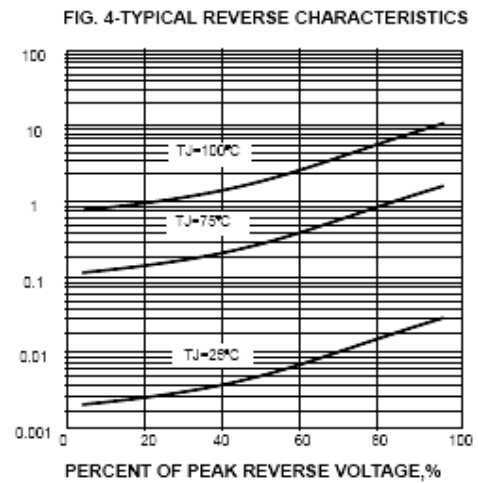
PEAK FORWARD SURGE CURRENT, AMPERES



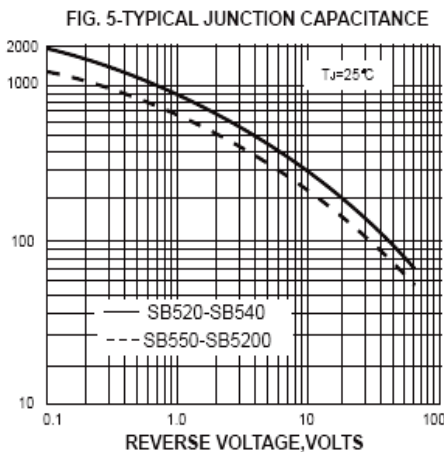
INSTANTANEOUS FORWARD CURRENT, AMPERES



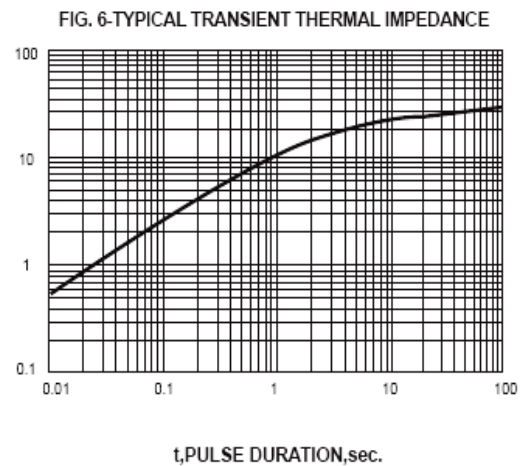
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



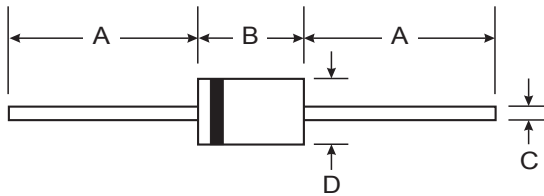
JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, $^\circ\text{C/W}$



Package Dimensions



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SB5xx	DO-201AD	Tape and BOX	1250pcs / BOX	

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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