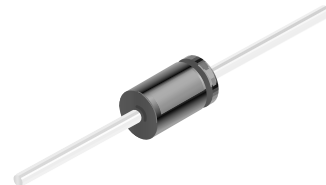


Surface Mount Trench Schottky Rectifier Diode in DO-201AD

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

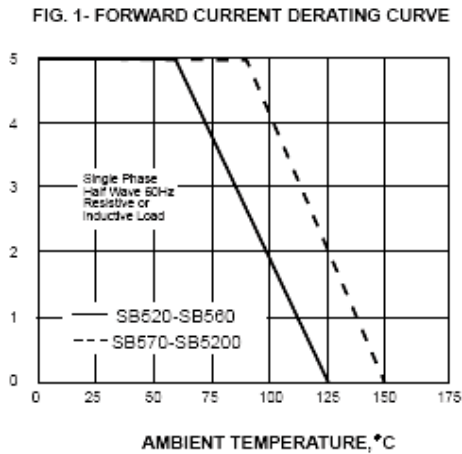
Absolute Maximum Ratings									
Ratings at 25 °C, ambient temperature unless otherwise specified									
Parameter	Symbols	SB520	SB540	SB560	SB580	SB5100	SB5150	SB5200	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	40	60	80	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	0.55		0.7		0.85		0.95	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			0.05				mA
		50.0			10.0				
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes 1:Thermal Resistance Junction to Ambient.

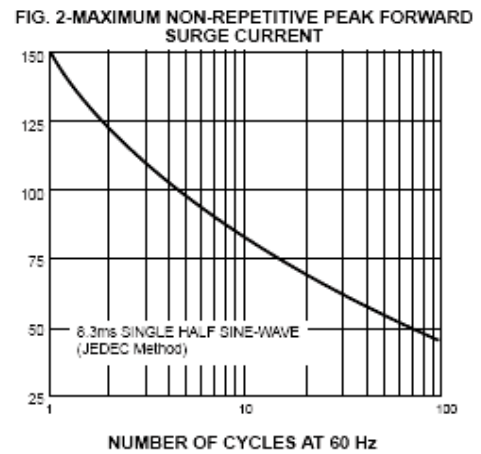
2:Measured at 1.0MHz and applied reverse voltage of 4.0v dc.

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

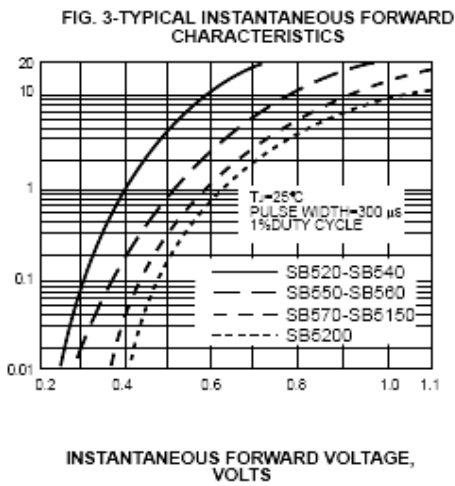
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



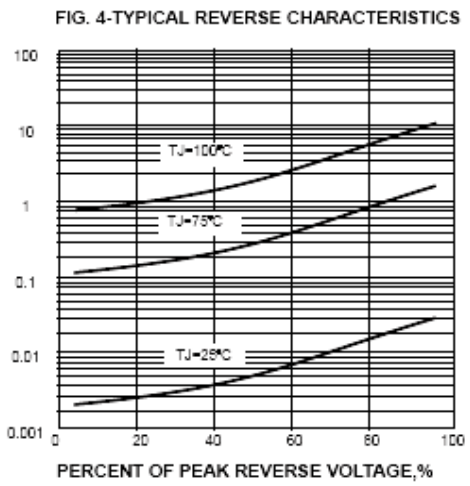
PEAK FORWARD SURGE CURRENT,
AMPERES



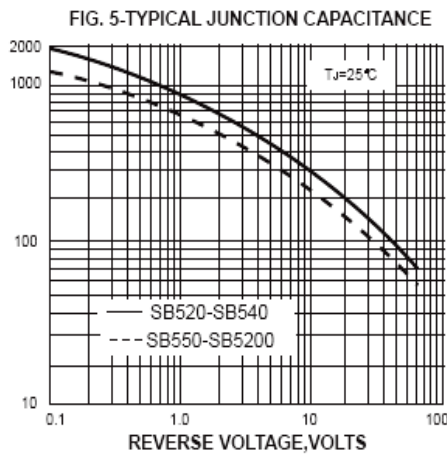
INSTANTANEOUS FORWARD CURRENT, AMPERES



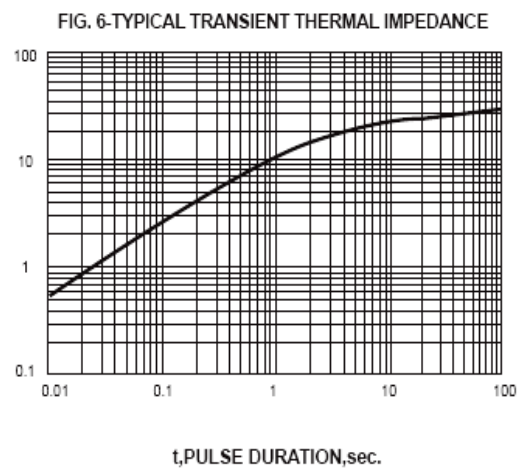
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



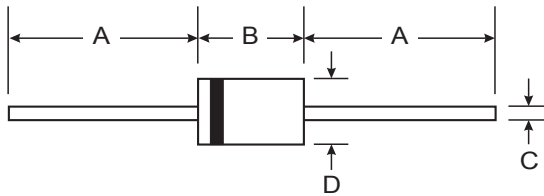
JUNCTION CAPACITANCE, pF



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



Package Dimensions



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	0.90	1.30
D	4.80	5.60
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-2020	1.0	Initial release

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