

3.0Amp Schottky Barrier Rectifiers

Reverse Voltage 20V to 60V Forward Current 3A

SB320 thru SB360

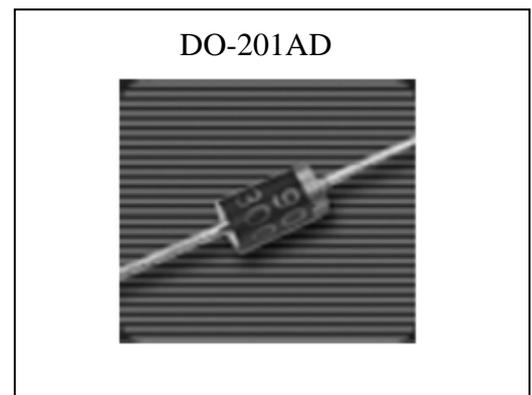
Features

- Metal-semiconductor junction with guard ring.
- Epitaxial construction
- Low forward voltage drop
- High current capability

Mechanical Data

- Case : Molded plastic DO-201AD
- Epoxy : UL94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end.
- Mounting Position : Any.
- Weight: 0.041 oz., 1.15 gram

Outline

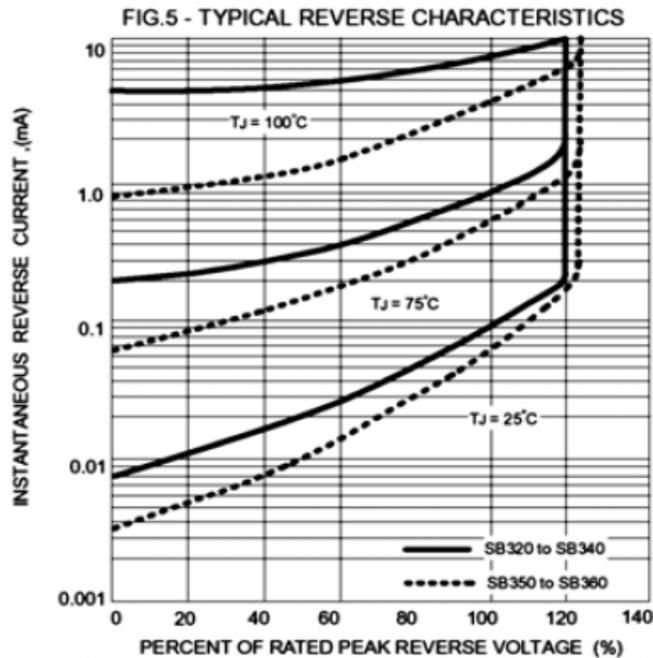
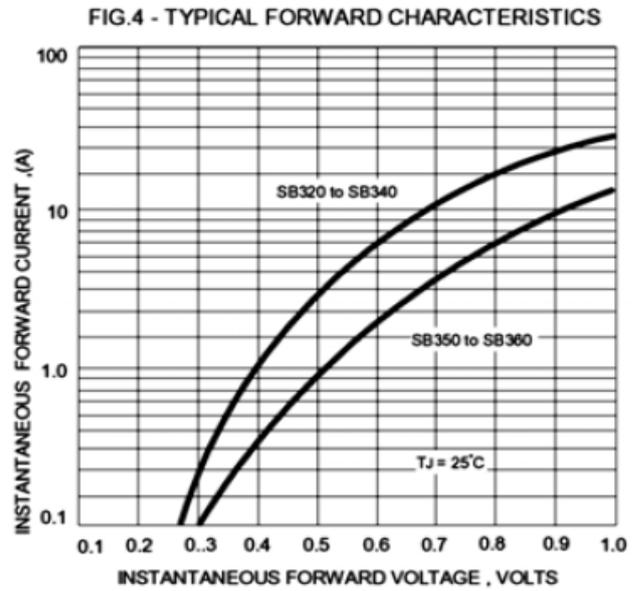
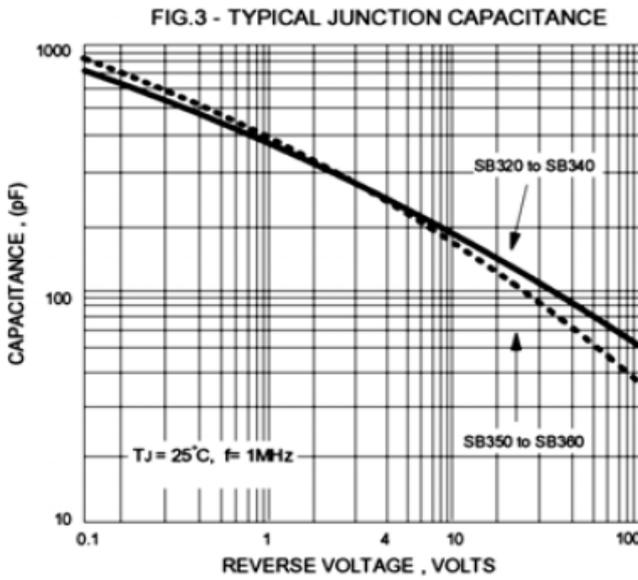
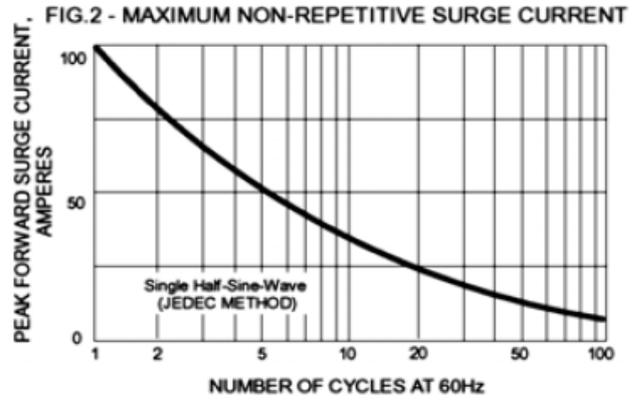
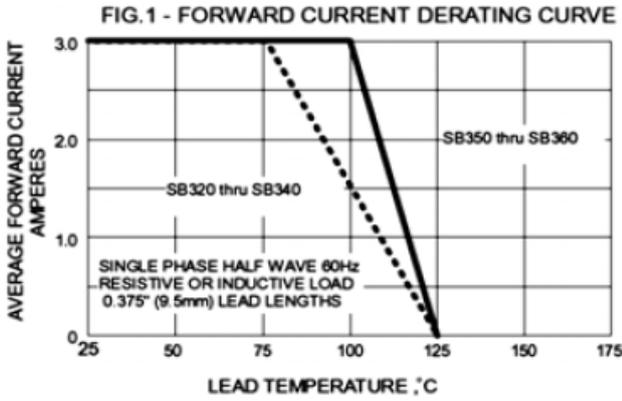


Maximum Ratings and Electrical Characteristics

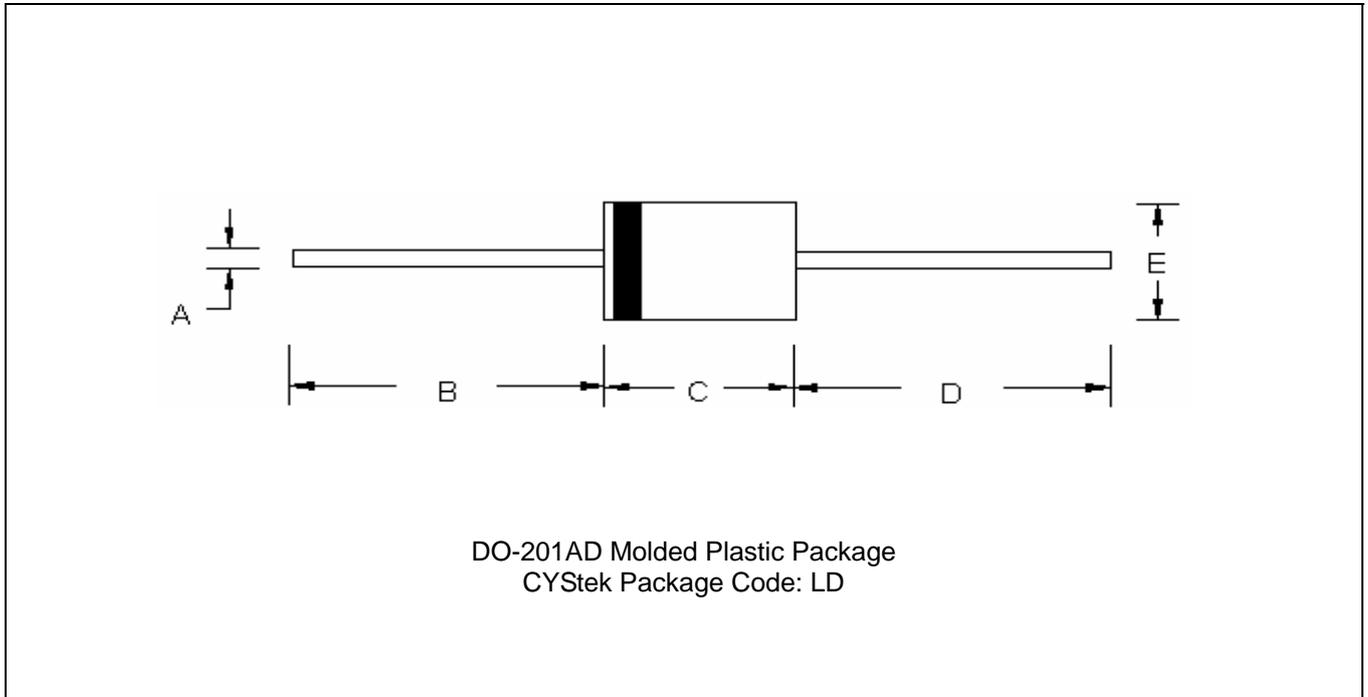
(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%)

Parameter	Symbol	Type					Units
		SB320	SB330	SB340	SB350	SB360	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum forward voltage at $I_F=3A$	V_F	0.50			0.74		V
Maximum average forward rectified current @ 0.375"(9.5mm) lead length (see Fig 1)	$I_{F(AV)}$	3					A
Peak forward surge current @8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	100					A
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ C$	0.5					mA
	$T_J=100^\circ C$	20					
Typical thermal resistance, junction to lead	$R_{\theta JL}$	15					°C/W
Typical junction capacitance @ f=1MHz and applied 4VDC reverse voltage	C_J	250					pF
Operating junction temperature range	T_J	-55 ~ +125					°C
Storage temperature range	T_{STG}	-55 ~ +150					°C

Characteristic Curves



DO-201AD Dimension



DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	φ0.048	φ0.052	φ1.20	φ1.30	D	1.000	-	25.40	-
B	1.000	-	25.40	-	E	φ0.190	φ0.210	φ4.80	φ5.30
C	0.285	0.375	7.20	9.50					

Notes : 1. Controlling dimension : millimeters.
 2. Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 3. If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material :

- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Mold Compound : Epoxy resin family, flammability solid burning class: UL94V-0

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