

SB520 thru SB5100

1. Feature & Dimensions

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Guarding for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals

2. Mechanical Data

Case: JEDEC DO-201AD, molded plastic over glass body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

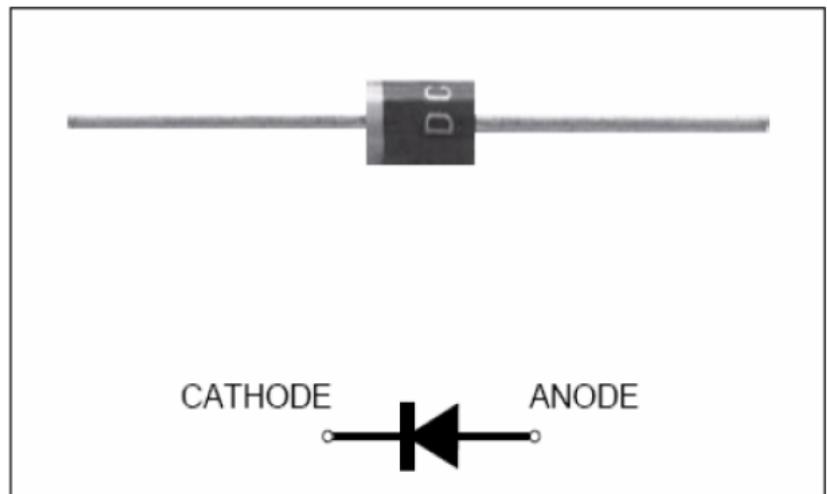
Mounting Position: Any

Weight: 0.04 oz., 1.13 g

Handling precaution: None

3. Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.



We declare that the material of product compliance with RoHS requirements.

Parameter Symbol	symbol	SB520	SB530	SB540	SB550	SB560	SB580	SB5100	Unit
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	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$IF(AV)$	5.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Operating junction and storage temperature range	T_J, T_{STG}	-40 to +125							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB520	SB530	SB540	SB550	SB560	SB580	SB5100	Unit				
Maximum instantaneous forward voltage at 5.0A	V_F	0.50		0.70		0.84		V					
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	0.5 20							mA				
Typical thermal resistance (Note 2)	$R_{\theta JA}$	25							°C/W				
Typical junction capacitance at 4.0V, 1MHz	CJ	500		380		PF							

NOTES:

- Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

4. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

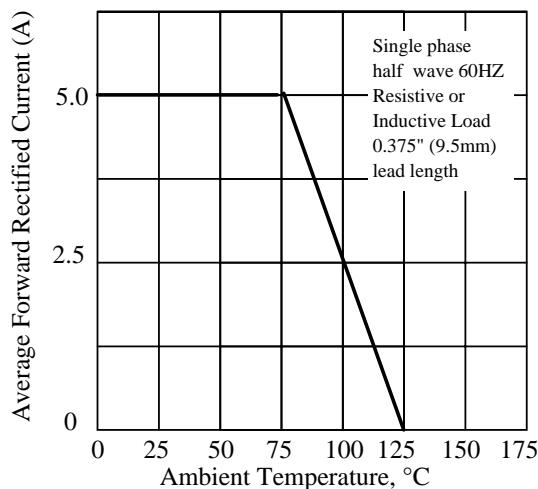


Fig. 3. - Typical Instantaneous Forward Characteristics

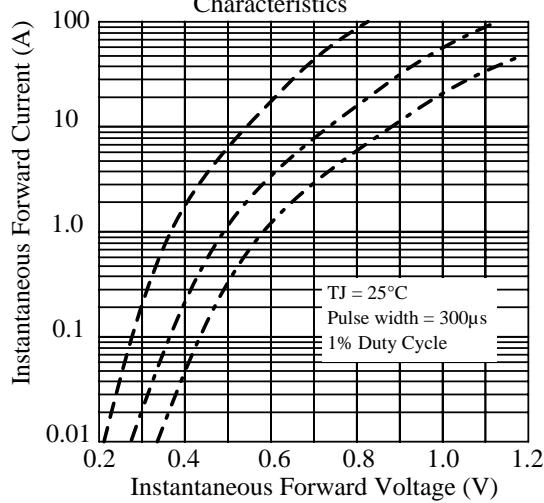


Fig 5. - typical transient thermal impedance

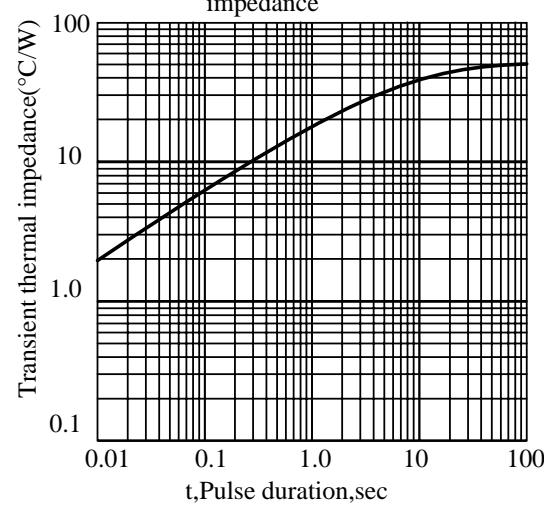


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

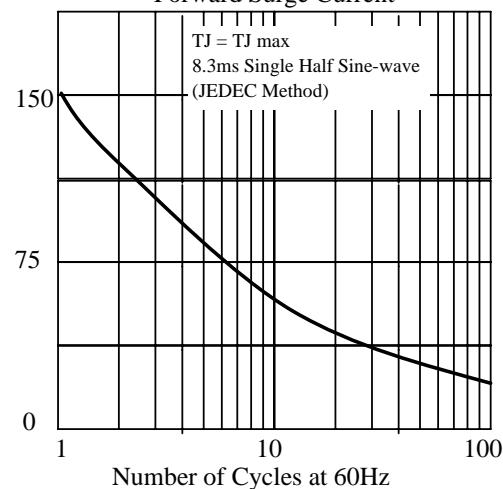


Fig 4. - Typical Reverse Characteristics

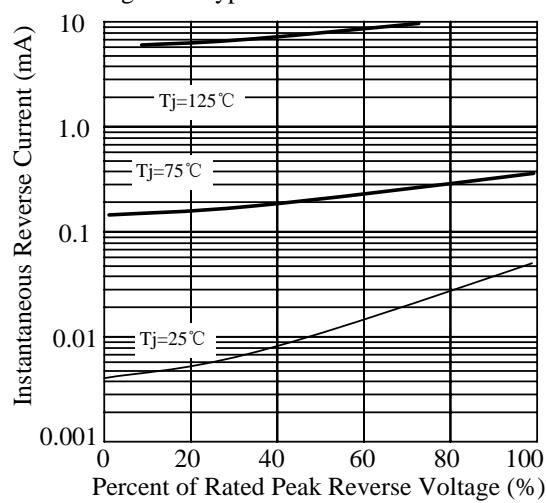
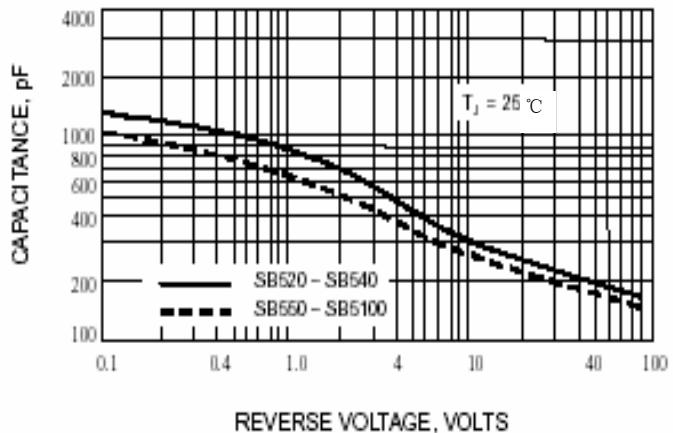
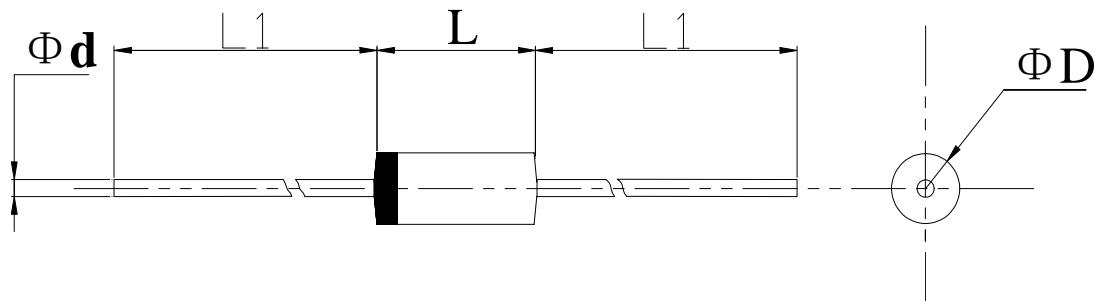


Fig 6. - Typical Junction Capacitance



5.Package Dimensions in inches and (millimeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.335	0.375	8.5	9.5
L1	1.0	-	25.4	-
ΦD	0.197	0.220	5.0	5.6
Φd	0.048	0.052	1.2	1.3

Note:
 DO-201AD
 molded plastic case
 The marking band indicates the cathode



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单击下面可查看定价，库存，交付和生命周期等信息

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