

CURRENT 50 Ampere
VOLTAGE RANG 50 to 1000 Volts

D50SB10 THRU D50SB100

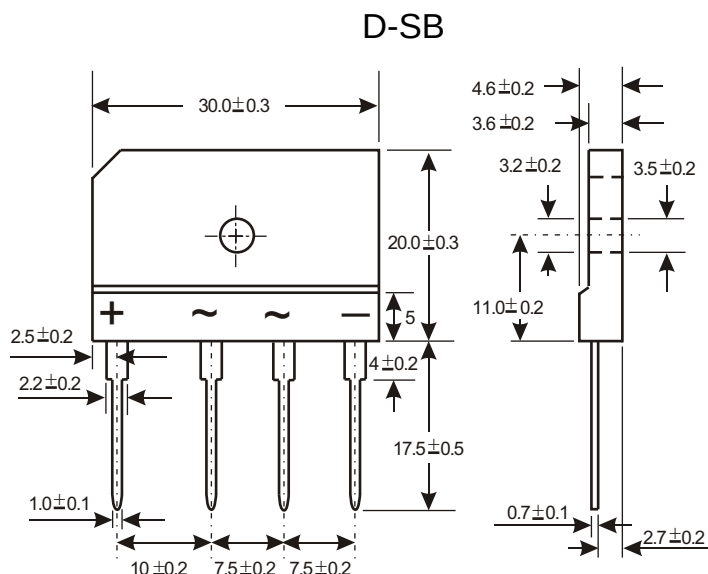


Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS Ideal for printed circuit boards
- High surge current capability

Mechanical Data

Case : Molded plastic body over passivated junctions
Terminals : Plated leads solderable per MIL-STD-750, Method 2026
Polarity : Polarity symbols molded on body
Mounting Position : Any(3)
Mounting Torque : 5 in-lbs max.
Weight : 0.31 ounce, 10.0 grams (approx)



Dimensions in millimeters(1mm = 0.0394")

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

Parameter Symbol		Symbol	D50SB10	D50SB20	D50SB40	D50SB60	D50SB80	D50SB100	Unit
Maximum repetitive voltage		VRRM	100	200	400	600	800	1000	V
Maximum RMS Voltage		VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	100	200	400	600	800	1000	V
Maximum DC reverse current TA=25 °C		IR	5						μA
at rated DC blocking voltage TA=125°C			500						
Maximum average forward rectified output current at	With heatsink Tc=100°C ⁽¹⁾	Io	50						A
	Without heatsink Ta=25°C ⁽²⁾		15						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load		IFSM	500						A
Rating of fusing (t<8.3ms)		I ² t	660						A2sec
Dielectric strength terminals to case, AC 1 minute Current 1mA		Vdia	2.5						KV
Max instantaneous forward voltage at 25A		VF	1.05						V
Operating junction temperature		TJ	-55~150						°C
Maximum thermal on P.C.B. without heat-sink		RθJA	22						°C/W
resistance per leg on Al plate heat-sink		RθJC	0.8						
Storage temperature		Tstg	-55~150						°C
Mounting torque		Tor	Rating Torque : 0.8 (Suggests 0.45~0.65)						N.m

Notes:

- (1) Unit case mounted on aluminum plate heatsink
(2) Units mounted on P.C.B. without heatsink

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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

Fig. 1 Derating Curve

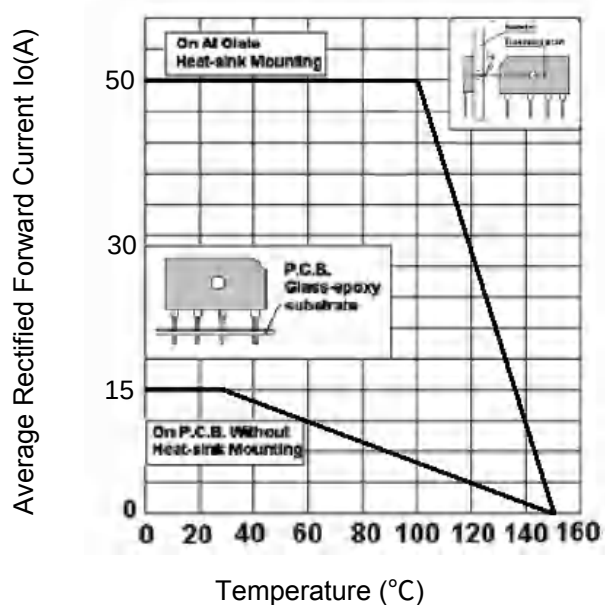


Fig.2 Typical Reverse Characteristics

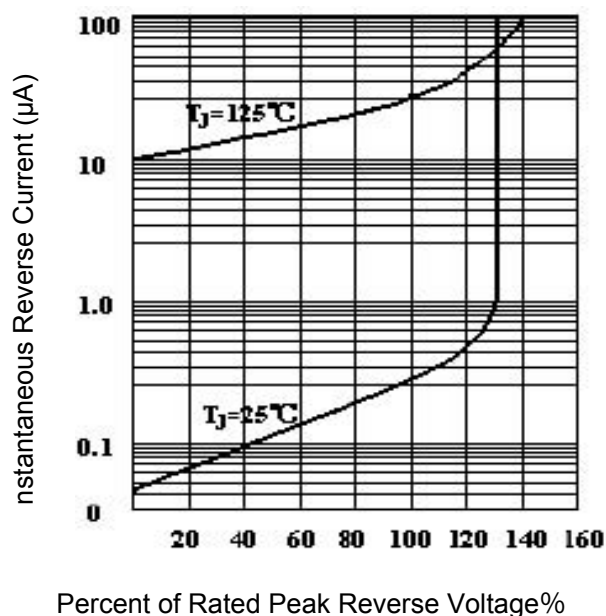


Fig.3 Forward Voltage

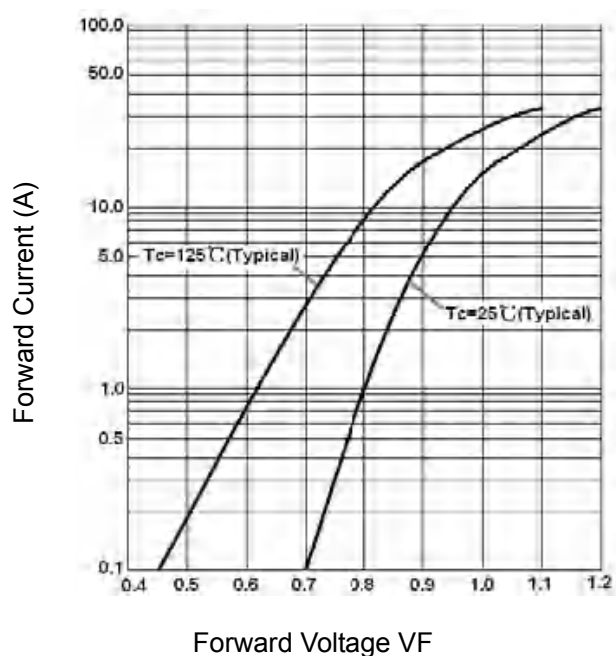


Fig.4 Peak Surge Forward Capability

