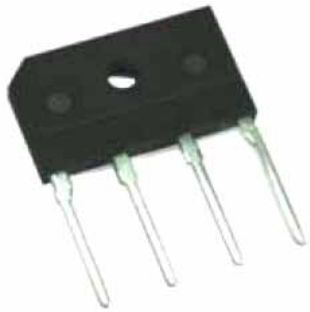
D3SB10 Thru D3SB100

High Current Glass Passivated Molding Single-Phase Bridge Rectifier

Reverse Voltage 100 to 1000V Forward Current 4.0 A

FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM



1. Maximum & Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter Symbol		Symbol	D3SB10	D3SB20	D3SB40	D3SB60	D3SB80	D3SB100	Unit
Maximum repetitive voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum DC reverse current TA=25 ℃		IR	5						μA
at rated DC blocking voltage TA=125℃			500						
Maximum average forward rectified output current at	With heatsink Tc=100℃	Io	4.0						A
	Without heatsink Ta=25℃		2.3						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load		IFSM	150						A
Rating of fusing (t<8.3ms)		I^2t	93						A^2sec
Dielectric strength terminals to case， AC 1 minute Current 1mA		Vdia	2.5						KV
Max instantaneous forward voltage at 2.0A		VF	1.05						V
Operating junction temperature		TJ	-55~150						℃
Maximum thermal on P.C.B. without heat-sink		$R_{\theta JA}$	26						℃/W
resistance per leg on Al plate heat-sink		$R_{\theta JC}$	4.2						
Storage temperature		Tstg	-55~150						℃
Mounting torque		Tor	Rating Torque : 0.8						N.m

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2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 Derating Curve

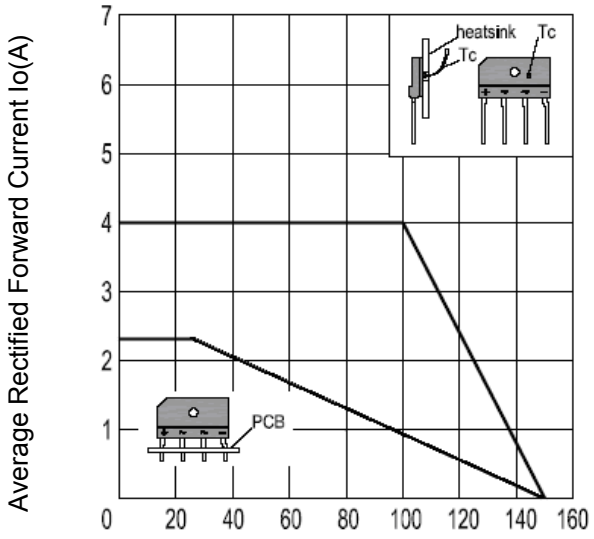


Fig.2 Typical Reverse Characteristics

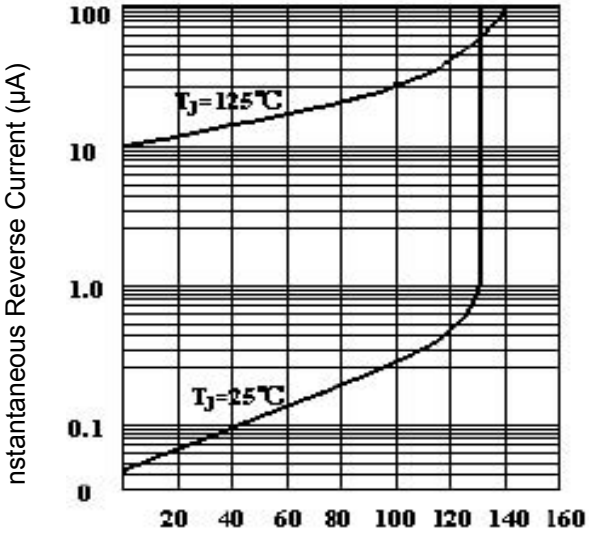


Fig.3 Forward Voltage

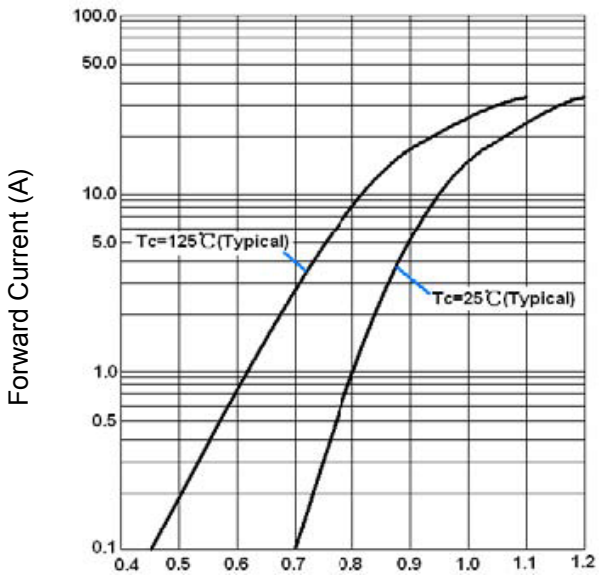
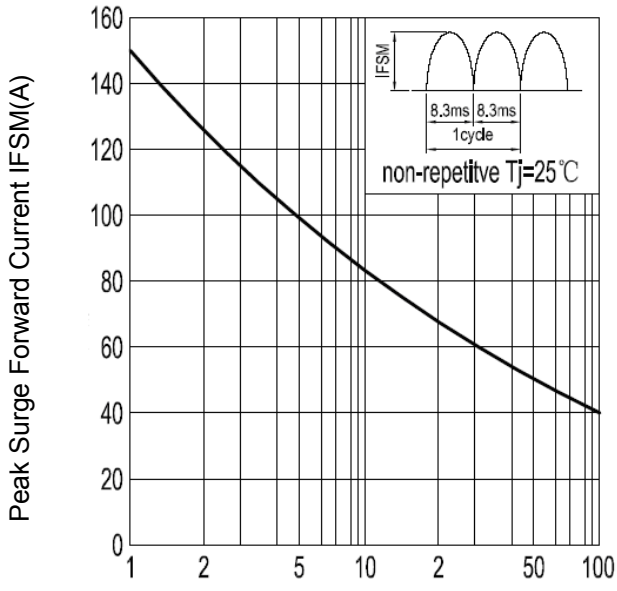


Fig.4 Peak Surge Forward Capability



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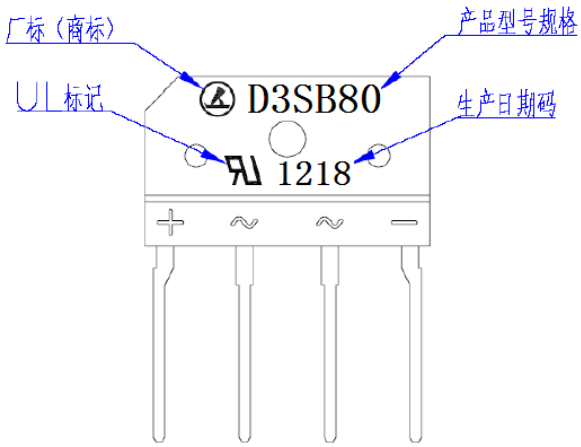
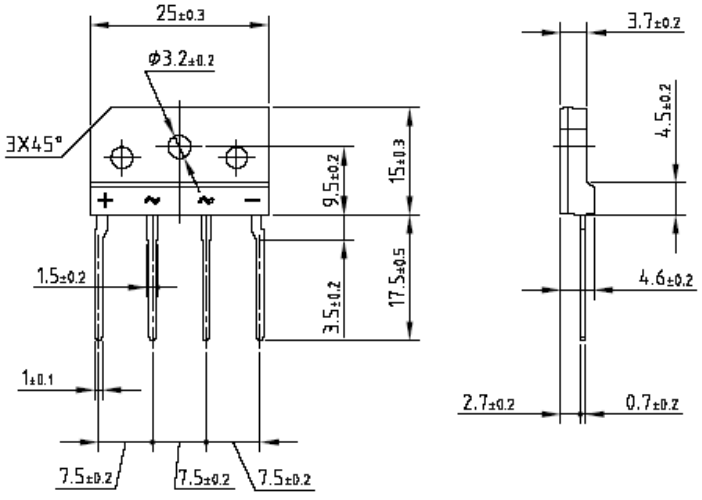
3. Marking Identification



Note：

生产日期码包含4位数字，例如“1218”，前两个数字“12”表示为2012年，另外二个数字“18”是指第18周，即表示该产品为2012年18周生产。

型号： **D 3 SB 80**

- 80 → bridge reverse voltage=800V
- SB → mean：single -in-line bridge
- 3 → average rectified forward Current=4A
- D → mean：D series bridge

4. Dimension