

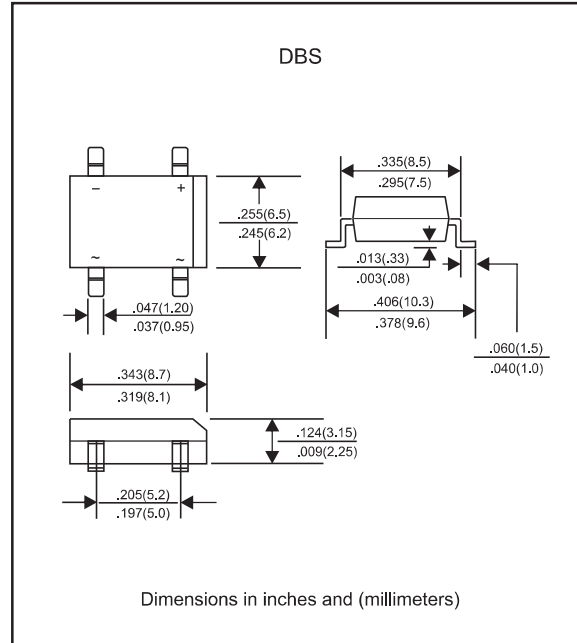
Features

- Surge overload ratings to 30 amperes peak.
- Save space on printed circuit board.
- Ideal for automated replacement.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Lead-free parts meet RoHS requirements.
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DBS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Mounting Position : Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_o			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^\circ\text{C}$	I_R			5.0	uA
	$V_R = V_{RRM}$ $T_J = 125^\circ\text{C}$				500	
I^2t Rating for Fusing	$t < 8.3\text{ms}$	I^2t			3.74	A^2s
Typical Junction Capacitance Per Element	Measured at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		25		pF
Typical thermal resistance	Junction to ambient mounted on P.C.B with 0.5×0.5 " ($13 \times 13\text{mm}$) copper pads.	$R_{\theta JA}$		40		$^\circ\text{C}/\text{W}$
Storage temperature		T_{STG}	-65		+175	$^\circ\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^\circ\text{C}$)
DB101S	50	35	50	1.0	-55 to +150
DB102S	100	70	100		
DB103S	200	140	200		
DB104S	400	280	400		
DB105S	600	420	600		
DB106S	800	560	800		
DB107S	1000	700	1000		

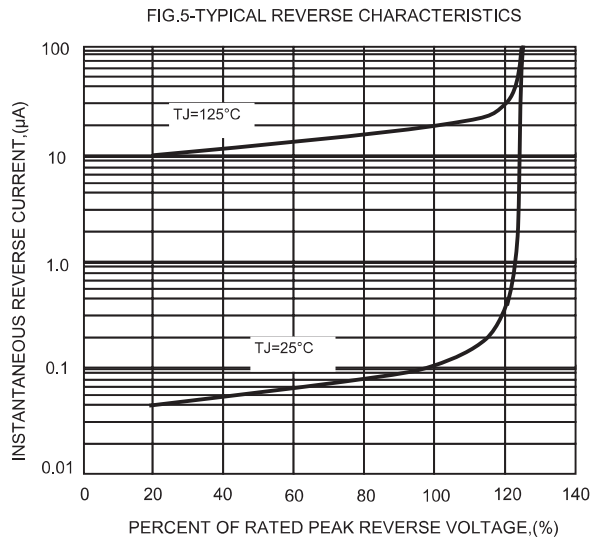
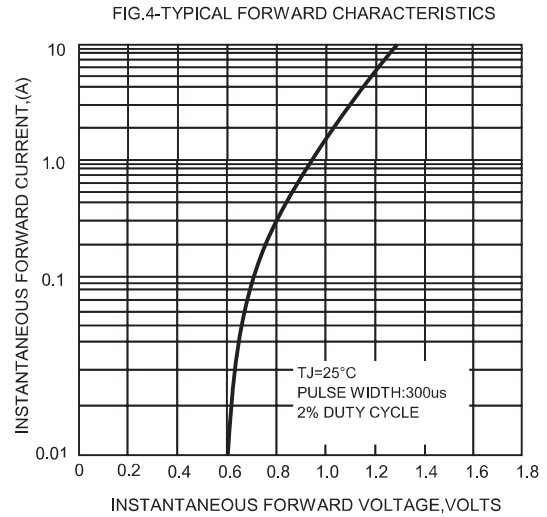
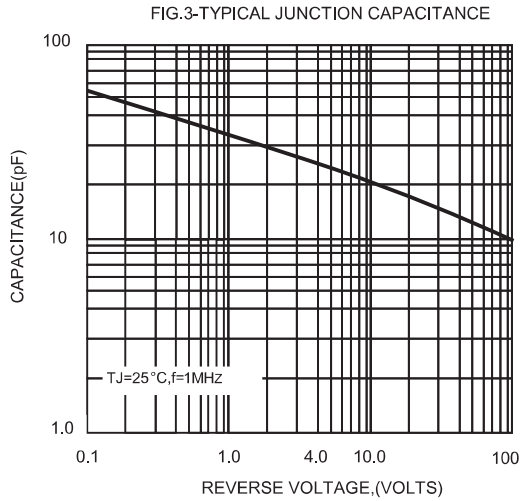
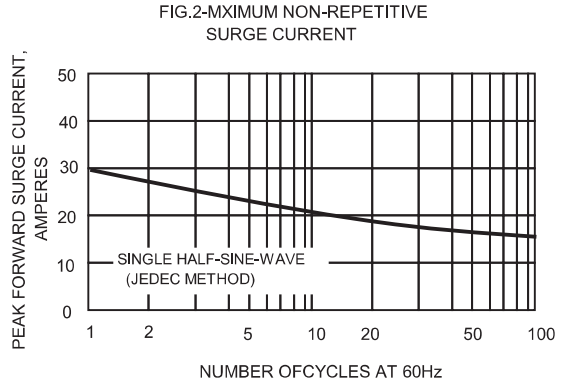
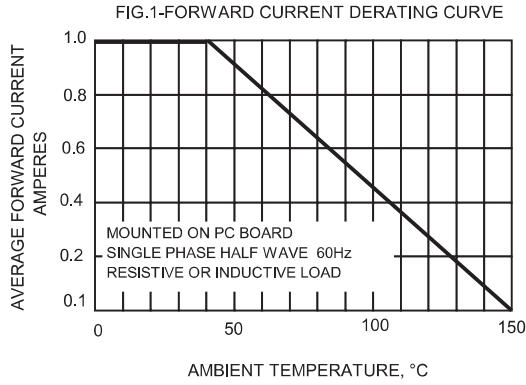
*1 Repetitive peak reverse voltage

*2 RMS voltage

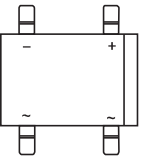
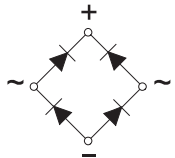
*3 Continuous reverse voltage

*4 Maximum forward voltage @ $I_F=1.0\text{A}$

Rating and characteristic curves (DB101S THRU DB107S)



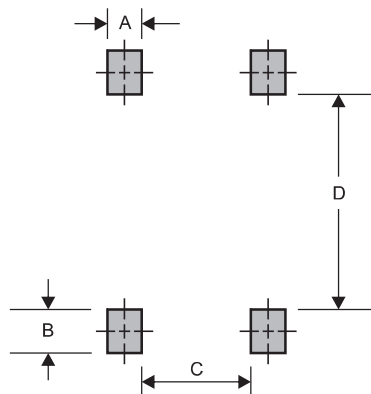
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
DB101S	DB101S
DB102S	DB102S
DB103S	DB103S
DB104S	DB104S
DB105S	DB105S
DB106S	DB106S
DB107S	DB107S

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C	D
DBS	0.059 (1.50)	0.047 (1.20)	0.157 (4.00)	0.291 (7.40)