

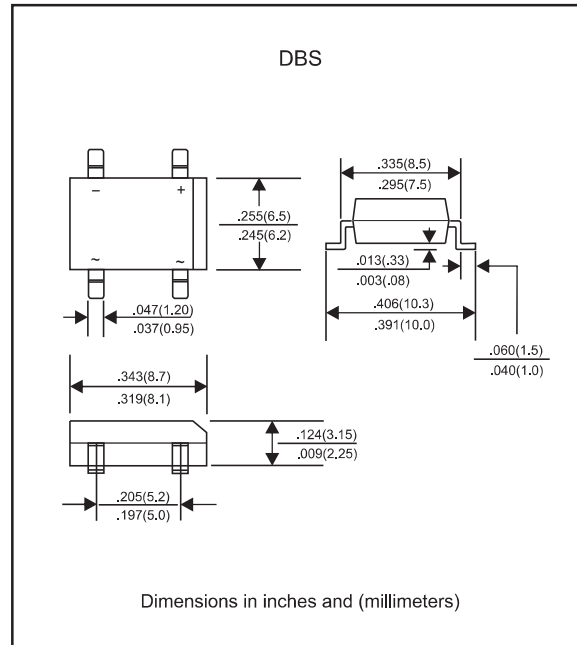
Features

- 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.
- UL recognized file # E321971
- Suffix "-H" indicates Halogen free parts, ex. DB101S-H.

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
- Weight : Approximated 0.32 gram

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			10	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*13mm) 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_{Jv} ($^\circ\text{C}$)
DB101S	50	35	50	1.10	-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		

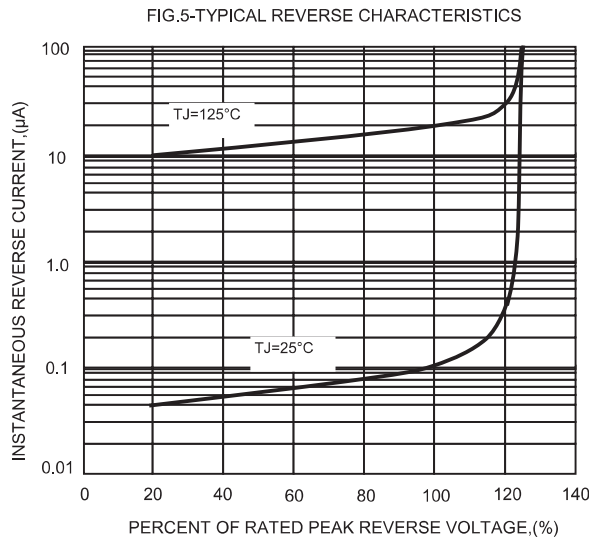
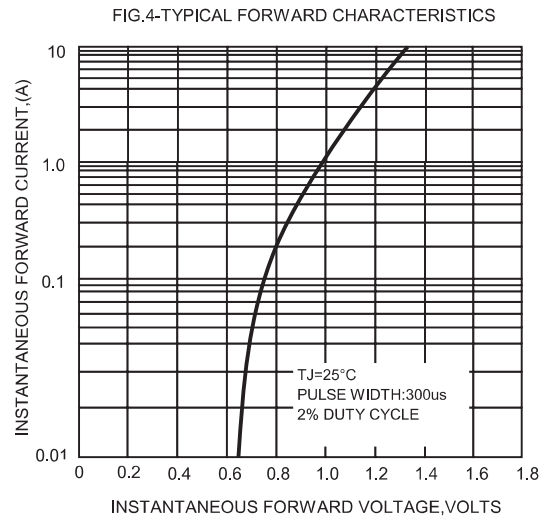
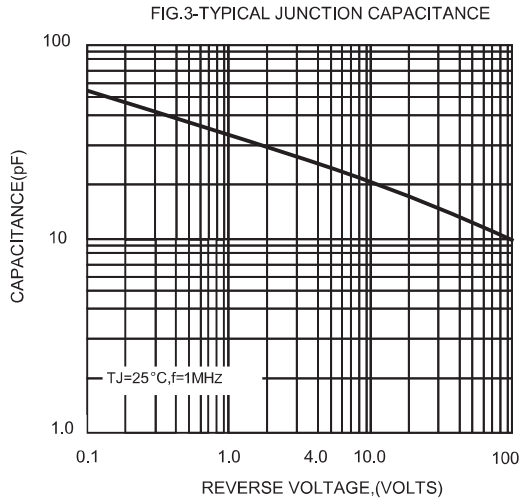
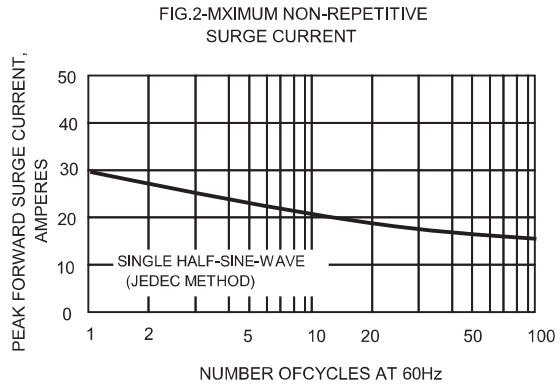
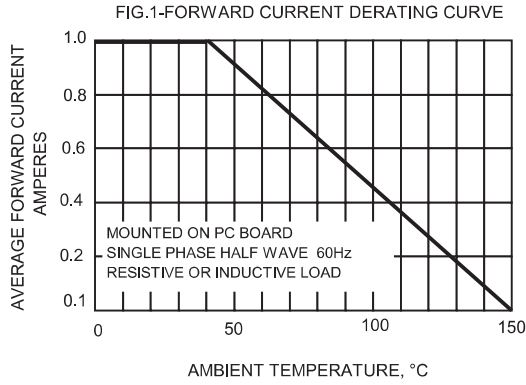
*1 Repetitive peak reverse voltage

*2 RMS voltage

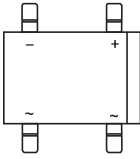
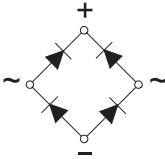
*3 Continuous reverse voltage

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

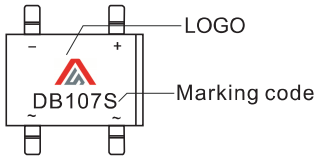
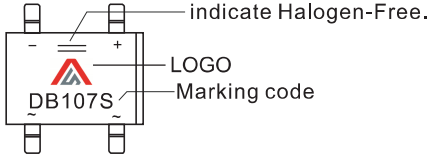
Rating and characteristic curves (DB101S THRU DB107S)



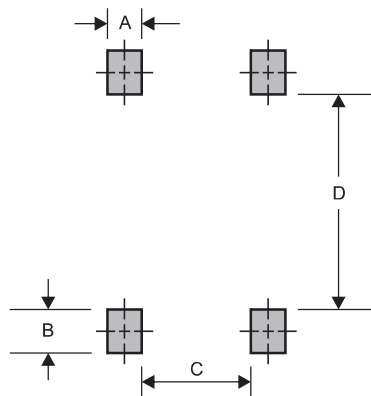
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code	Example	
DB101S	DB101S	1. For Halogen Device	2. For Halogen-free Device
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)