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SEMICONDUCTOR



ESD



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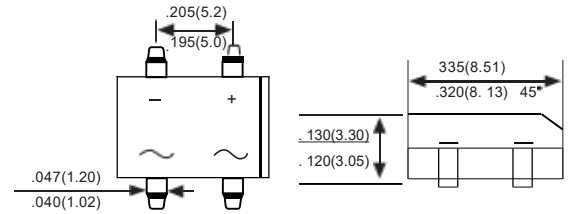


PLED

Product data sheet

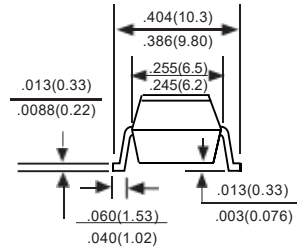
Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability



Mechanical Data

- Case** : JEDEC DBS Molded plastic body
- Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity** : Polarity symbol marking on body
- Mounting Position** : Any
- Weight** : 0.02 ounce, 0.4 grams



Dimensions in inches and (millimeters)

REEL SPECIFICATION

P/N	PKG	QTY
DB301S-DB307S	DBS	1500

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$				3.0				A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				85				A
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F				1.1				V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ / $T_A=125^\circ\text{C}$	I_R				10 / 500				pA / pA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t				10.4				A ² s
Operating temperature range (Note1)	C_J				25				pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$				110				$^\circ\text{C/W}$
Operating temperature range	T_J				-55 to +150				$^\circ\text{C}$
storage temperature range	T_{STG}				-55 to +150				$^\circ\text{C}$

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient mounted on P.C.B. with 0.5*0.5" (13*13mm) copper pads.

Ratings And Characteristic Curves

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

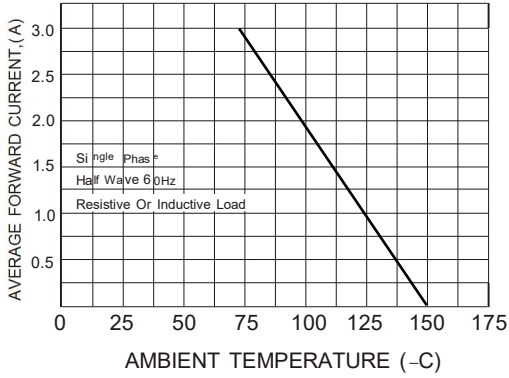


FIG. 2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

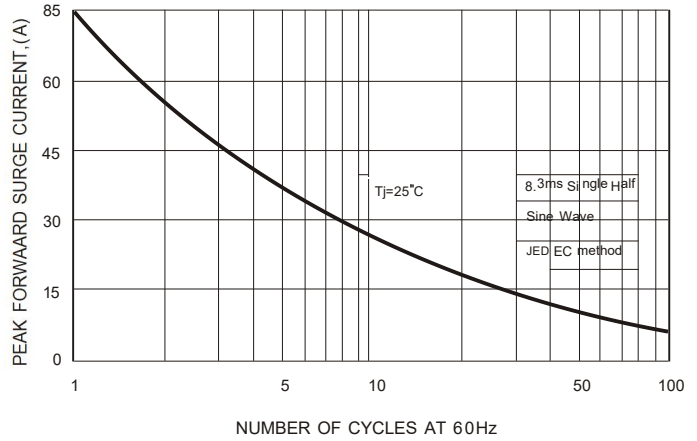


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

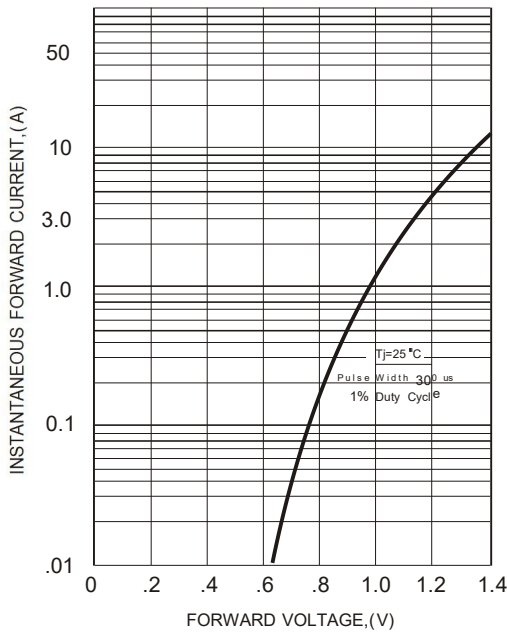
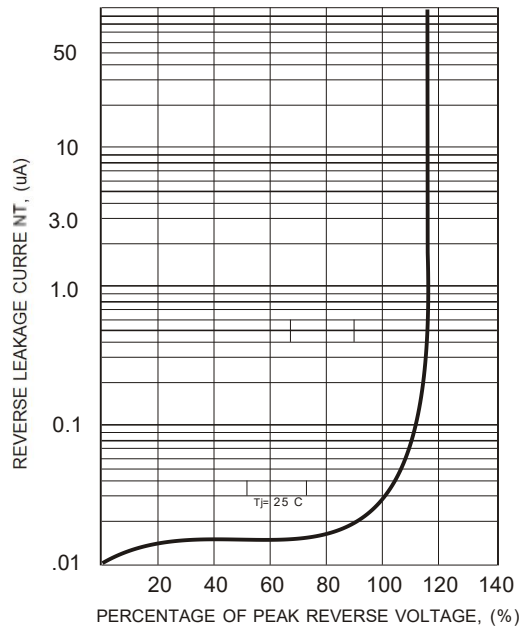


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



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