



## FEATURES

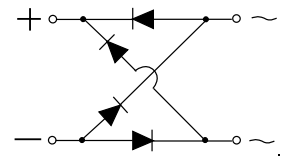
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded plastic technique
- \* High surge current capability
- \* Polarity: marked on body
- \* Mounting position: Any



DBS

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
DB301S-DB307S	DBS		1500



Internal Structure

## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	UNIT
Maximum Recurrent 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 @Ta=40°C	$I_{(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC .Method)	$I_{FSM}$	60							A
Maximum Forward Voltage at 2.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @Tj=25°C @Tj=125°C	$I_R$	10 500							$\mu A$
$I^2t$ Rating for Fusing (t<8.3ms)	$I^2t$	10.4							A <sup>2</sup> s
Typical Junction capacitance Per Element(Note1)	$C_J$	25							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	40							°C/W
Operating Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

Note: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.



### Typical Characteristics

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

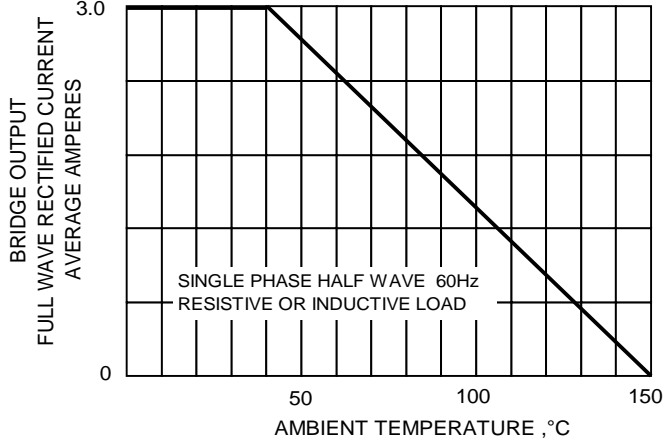


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

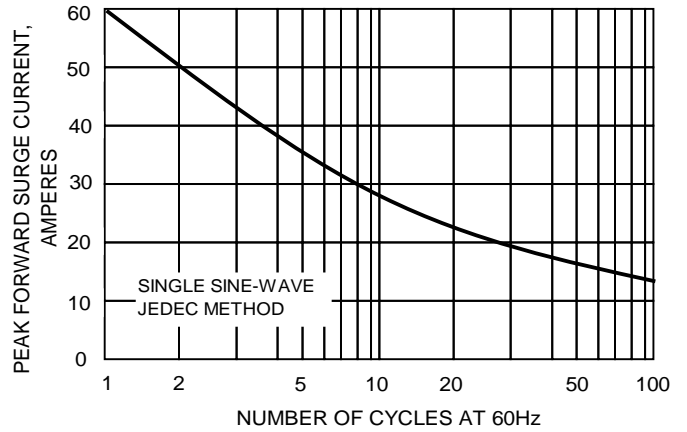


FIG.3-TYPICAL JUNCTION CAPACITANCE

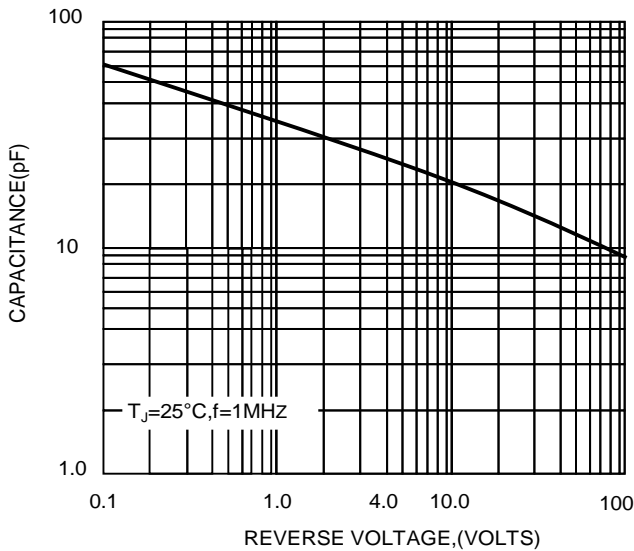


FIG.4-TYPICAL FORWARD CHARACTERISTICS

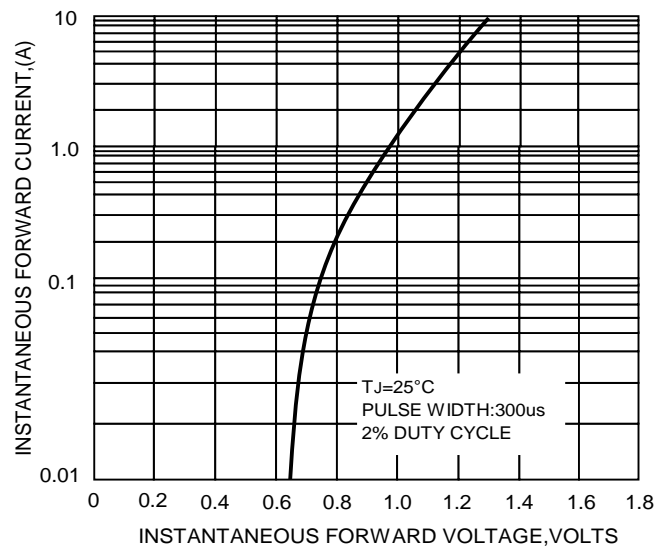
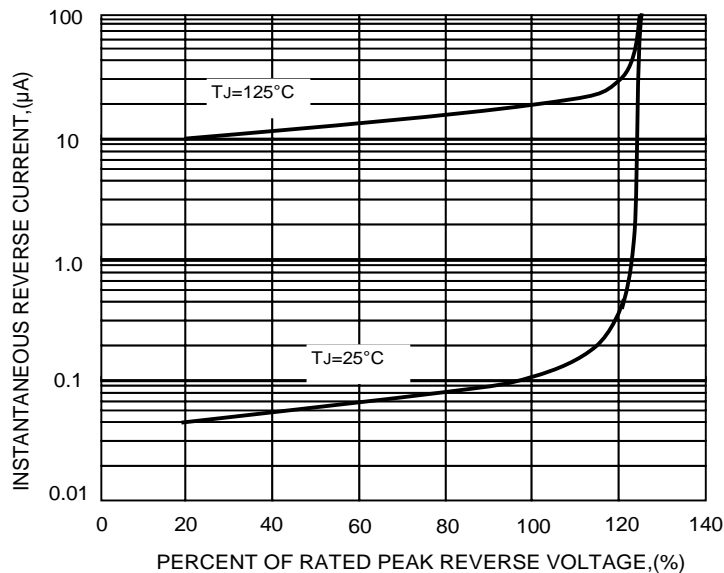
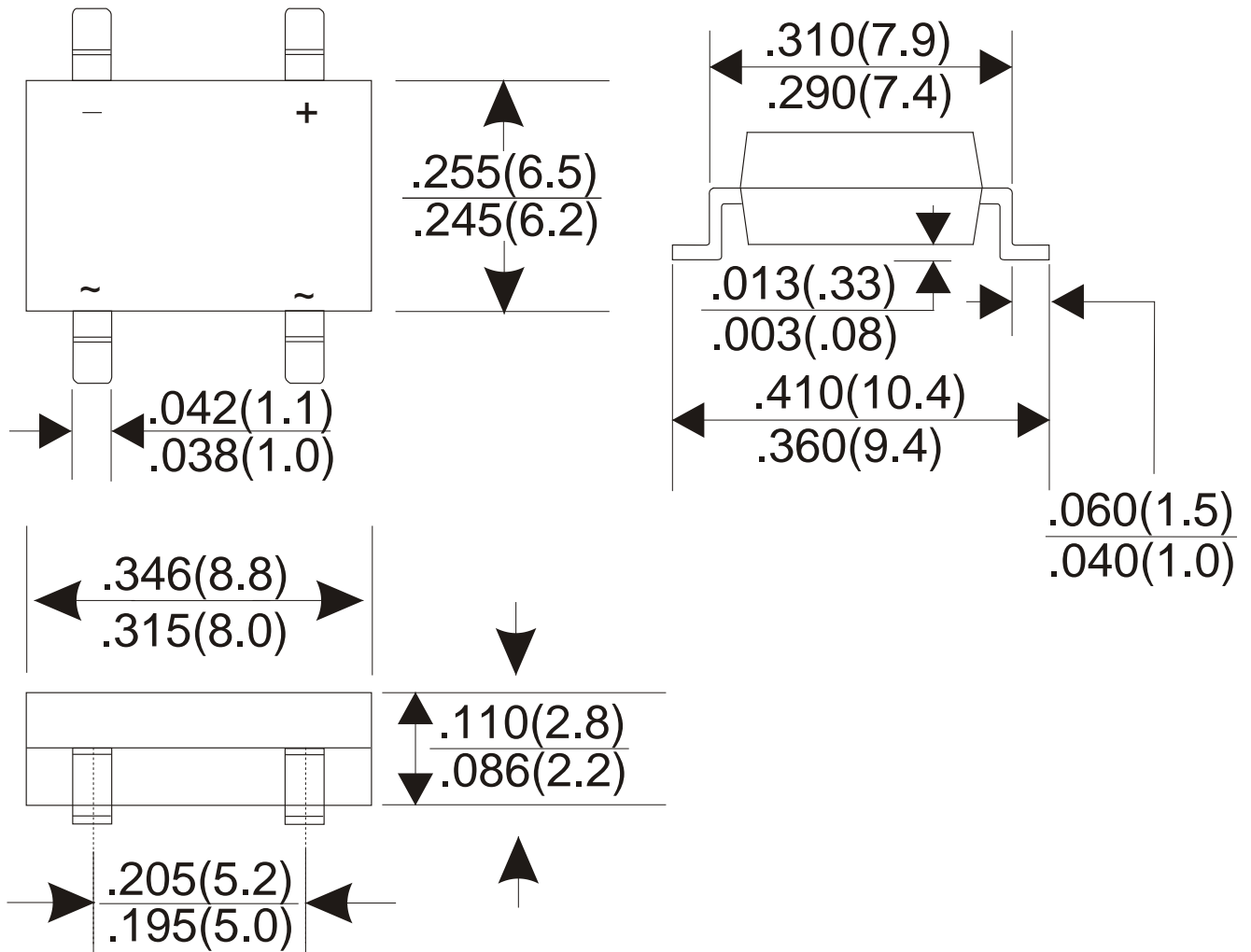


FIG.5-TYPICAL REVERSE CHARACTERISTICS





### DBS Package Outline Dimensions



Dimensions in inches and (millimeters)



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