

2A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS



DB201S to DB207S

DBS

**Surface Mount
Plastic package**

Features :

- 1). Ideal for Printed Circuit Board
- 2). Low Forward Voltage Drop, High Current Capability
- 3). Polarity Symbols Moulded on the body
- 4). Plastic Material has UL Flammability Class 94V-O
- 5). Weight : 0.38 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient Temperature unless otherwise specified.

Single Phase, Half Wave, 60Hz, Resistive or Inductive Load. For Capacitive Load, derate current by 20%.

CHARACTERISTICS	SYMBOL	DB 201S	DB 202S	DB 203S	DB 204S	DB 205S	DB 206S	DB 207S	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 Output Current @ $T_A=40^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge current 8.3ms Single Half-Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	at $T_A=25^\circ\text{C}$							μA
		at $T_A=125^\circ\text{C}$							μA
I^2t Rating for Fusing ($t<8.3\text{ms}$)	T_J	10.4							A^2s
Typical Junction Capacitance per Element (1)	C_J	25							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to +150							$^\circ\text{C}$

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) Cu pads.

TYPICAL CHARACTERISTICS CURVES

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

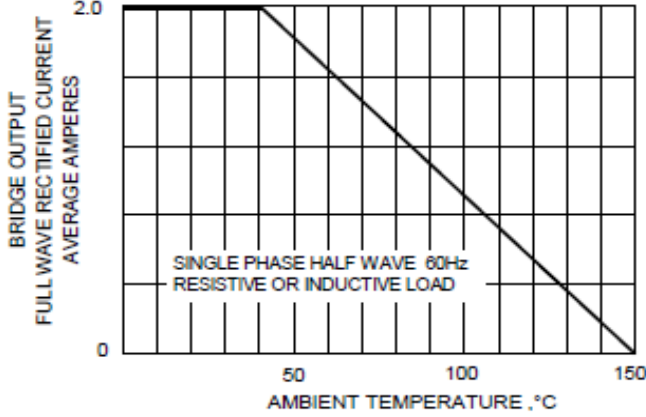


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

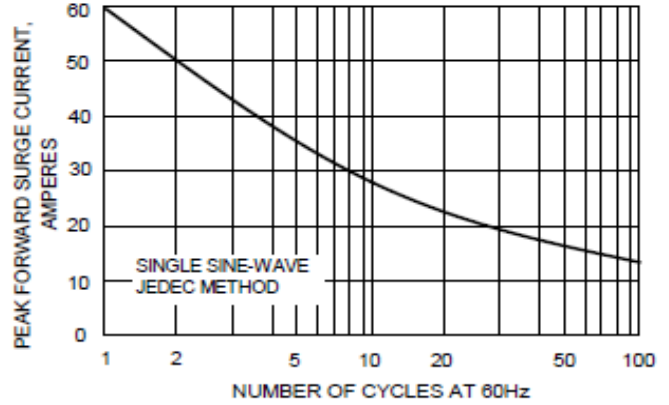


FIG.3-TYPICAL JUNCTION CAPACITANCE

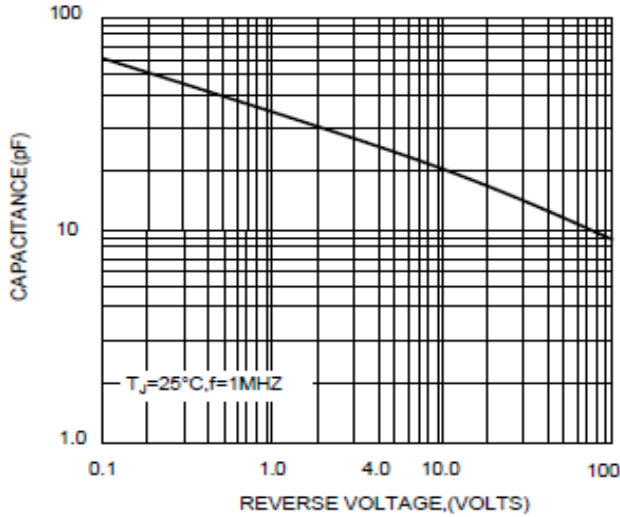


FIG.4-TYPICAL FORWARD CHARACTERISTICS

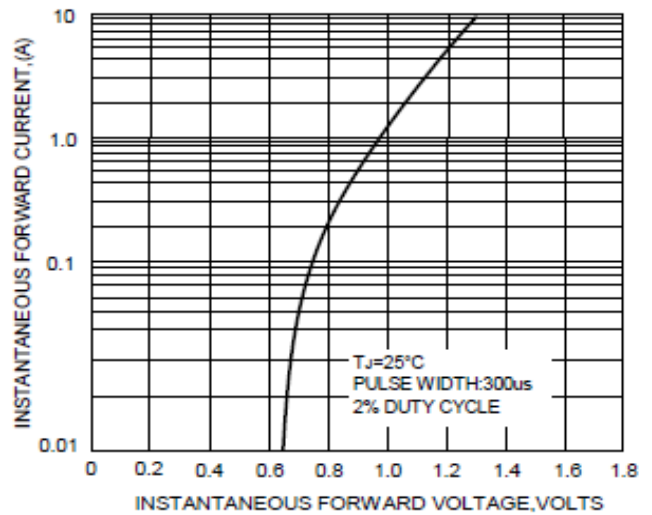
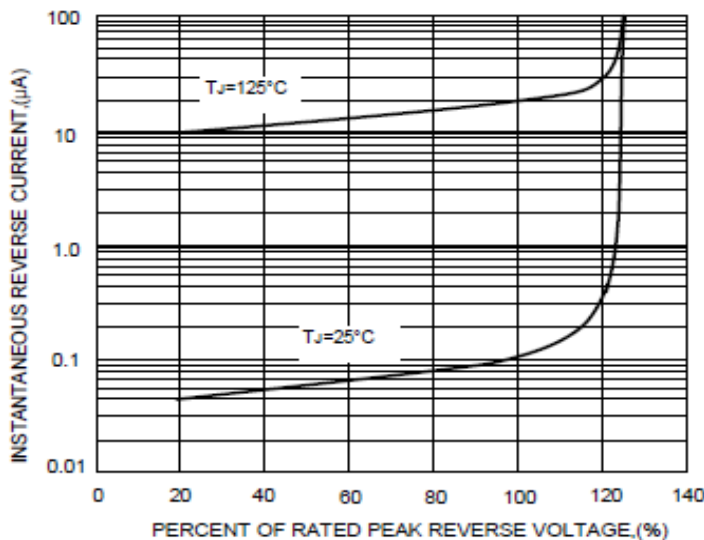
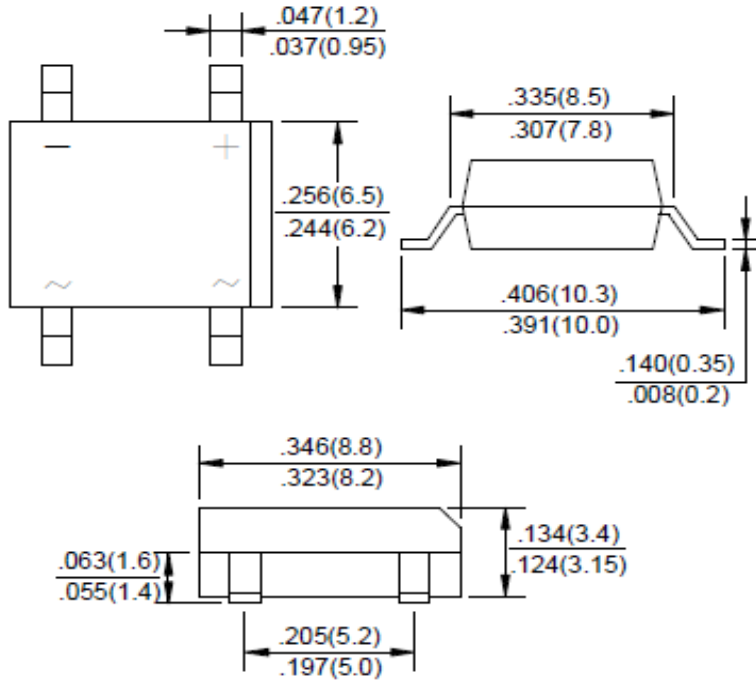


FIG.5-TYPICAL REVERSE CHARACTERISTICS



DBS PACKAGE OUTLINE AND DIMENSION

DBS



Dimensions in inches and (millimeters)



Continental Device India Pvt. Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Customer Notes

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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