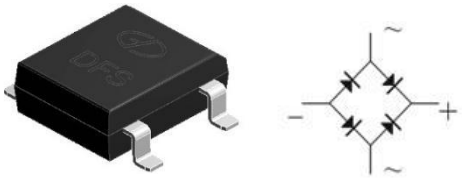
Reverse Voltage 1100V Forward Current 1.5A

Features

- Glass passivated Bridge Rectifiers
- Ideal for automated placement
- High surge current capability
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



DFS

Typical Applications

- General purpose use in ac-to dc bridge full wave rectification for SMPS, lighting, adapter, charger, home appliances, office equipment, and telecommunication applications

Mechanical Data

- Case: DFS, Epoxy meets UL-94V-0 Flammablity rating
- Terminals : Matte tin plated(E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- Polarity : As marked on body

Maximum Ratings (TA = 25 °C unless otherwise noted)				
Parameter		**Symbol**	**DB157S**	**Unit**
Maximum repetitive peak reverse voltage		V_{RRM}	1100	V
Maximum RMS voltage		V_{RMS}	770	V
Maximum DC blocking voltage		V_{DC}	1100	V
Maximum average forward rectified current		$I_{F(AV)}$	1.5	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	50	A
Rating for fusing (t≤8.3ms)		I^2t	10.4	A^2s
Operating junction and storage temperature range		T_J, T_{STG}	- 55 to + 150	°C
Typical junction capacitance	4.0 V, 1MHz	C_J	13	pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)				
Parameter	**Test Conditions**	**Symbol**	**DB157S**	**Unit**
Maximum instantaneous forward voltage	IF=0.75A,Ta=25°C	V_F	1.0	Volts
	IF=1.5A,Ta=125°C		1.1	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I_R	5	μA
	TA=125°C		50	
Typical reverse recovery time	I_F=0.5A,I_R=1.0A,	T_{rr}	1.9	uS
	I_{rr}=0.25A			
Typical thermal resistance[1)]	juntion to ambient	$R_{\theta JA}$	45	°C/W
	juntion to case	$R_{\theta JC}$	15	

Note:
1)The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 13×13mm copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

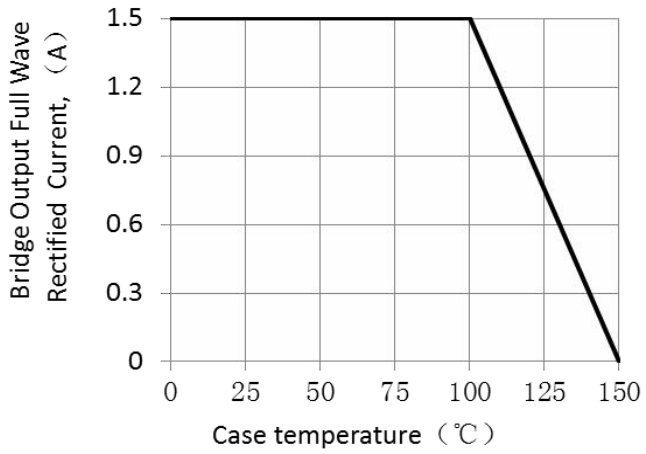


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

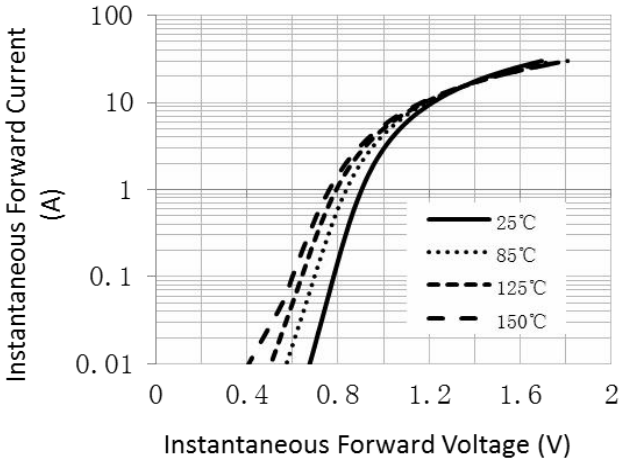


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

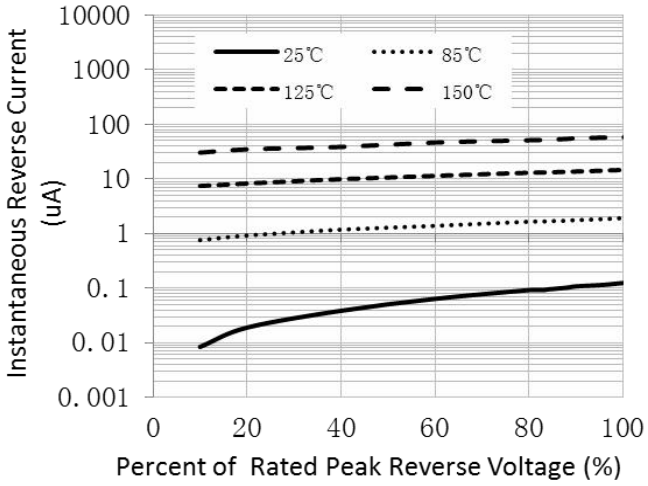
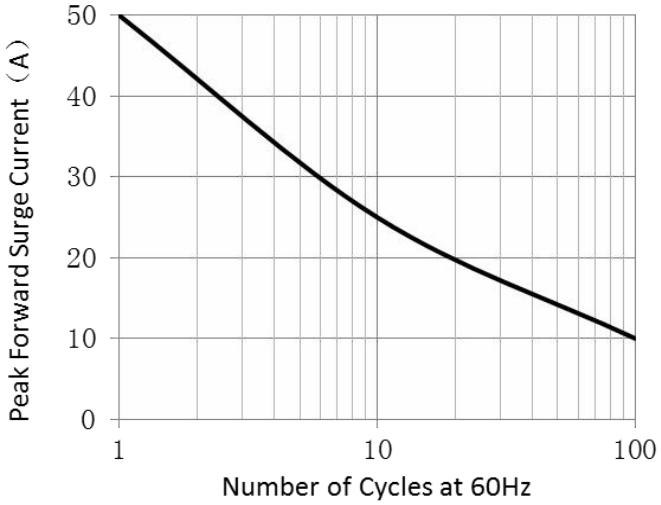


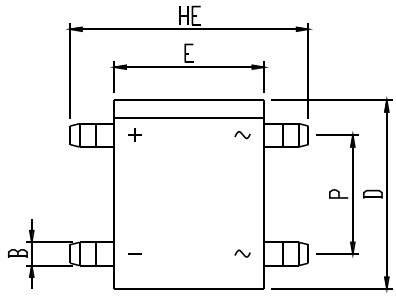
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



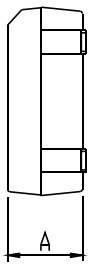
Package Outline Dimensions

in inches (millimeters)

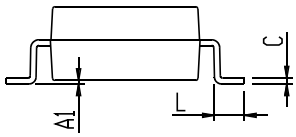
First angle projection



top view



right elevation



elevation view

	unit:mm			unit:inch	
Dim	Min	Max	Dim	Min	Max
A	3.05	3.30	A	0.120	0.130
A1	0.076	0.33	A1	0.003	0.013
B	1.02	1.20	B	0.040	0.047
C	0.22	0.33	C	0.0087	0.013
D	8.00	8.51	D	0.315	0.335
E	6.20	6.50	E	0.244	0.256
HE	9.80	10.30	HE	0.386	0.406
L	1.02	1.52	L	0.040	0.060
P	5.00	5.20	P	0.197	0.205

Revision History

Document Version	Date of release	Discroption of changes
Rev.A	2021/3/21	Released Datasheet
Rev.B	2023/12/21	Modify document format

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