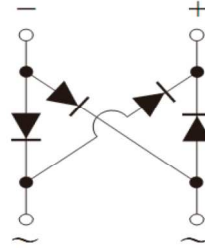




SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



DBF



Features
<ul style="list-style-type: none"> • Glass Passivated Die Construction • Low leakage • Ideal for printed circuit board • Surge overload rating-90A peak • Designed for Surface Mount Application • Plastic Material-UL Flammability 94V-0

Mechanical
<ul style="list-style-type: none"> • Case: DBF, molded plastic • Terminals:Plated Leads Solderable per MILSTD-202,Method208 • Polarity:As Marked on Case • Mounting Position:Any

Ordering Information			
Part No.	Remark	Package	Packing
DBF25xx Series	General	DBF	3000 / Tape &Reel
DBF25xx Series-H	Halogen Free		
DBF25xx Series-Q	Automotive		

Maximum Ratings (T _A =25°C unless otherwise noted)								
Parameter	SYMBOL	DBF251	DBF252	DBF254	DBF256	DBF258	DBF2510	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RMS}							
DC Blocking Voltage	V _{DC}							
RMS Reverse Voltage	V _{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T _C =110°C	I _{F(AV)}	2.5						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	90						A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	33.62						A ² s
Forward Voltage per element @I _F =1.25A @I _F =2.5A	V _{FM}	0.95 1.0						V
Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =125°C	I _R	5.0 500						μA
Typical Junction Capacitance per leg (Note 2)	C _J	30						pF
Typical Thermal Resistance per leg(Note 3)	R _{θJA}	35						°C/W
	R _{θJC}	7.8						
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +150						°C
Marking Code	SYMBOL	DBF251	DBF252	DBF254	DBF256	DBF258	DBF2510	

- Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Mounted on glass-epoxy substrate with 1oz/ft² 30x30 mm copper pad per pin.



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Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

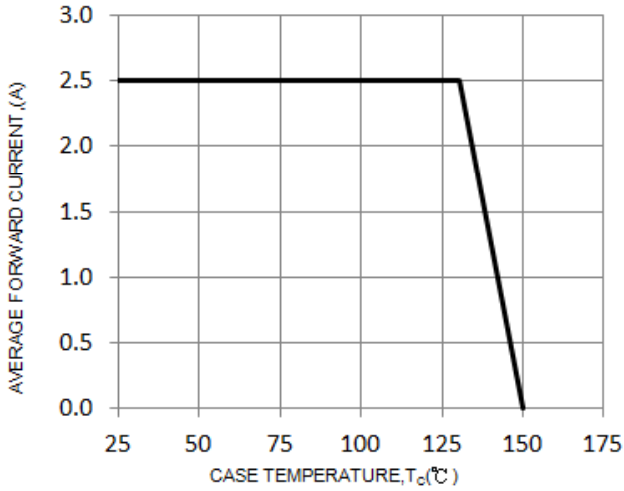


FIG. 2-Typical Forward Characteristics

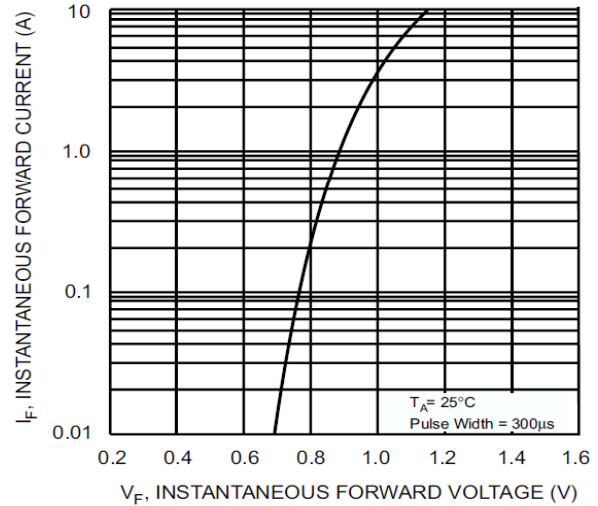


FIG. 3-Maximum Non-Repetitive Forward Surge Current

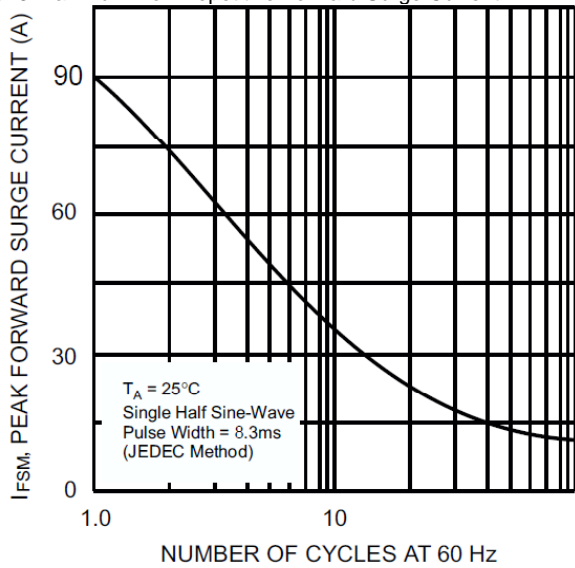


FIG. 4-Typical Reverse Characteristics

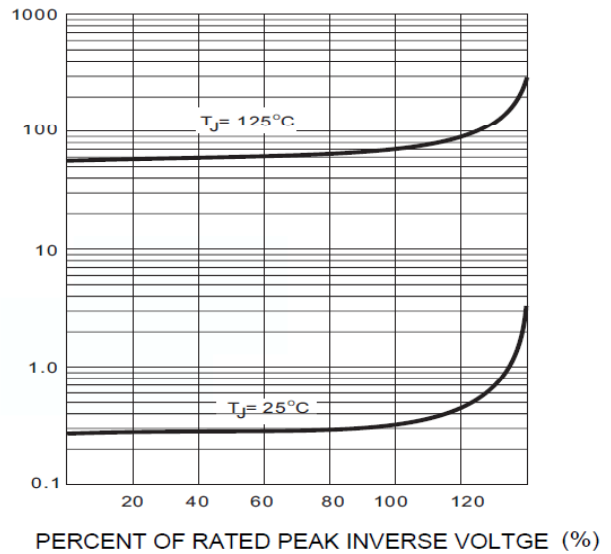
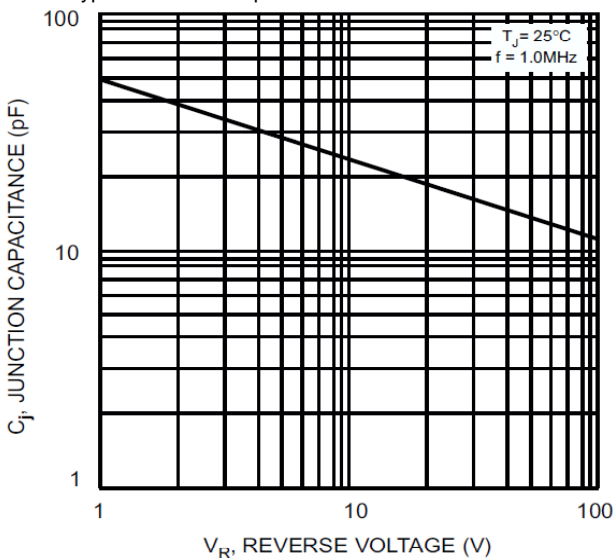


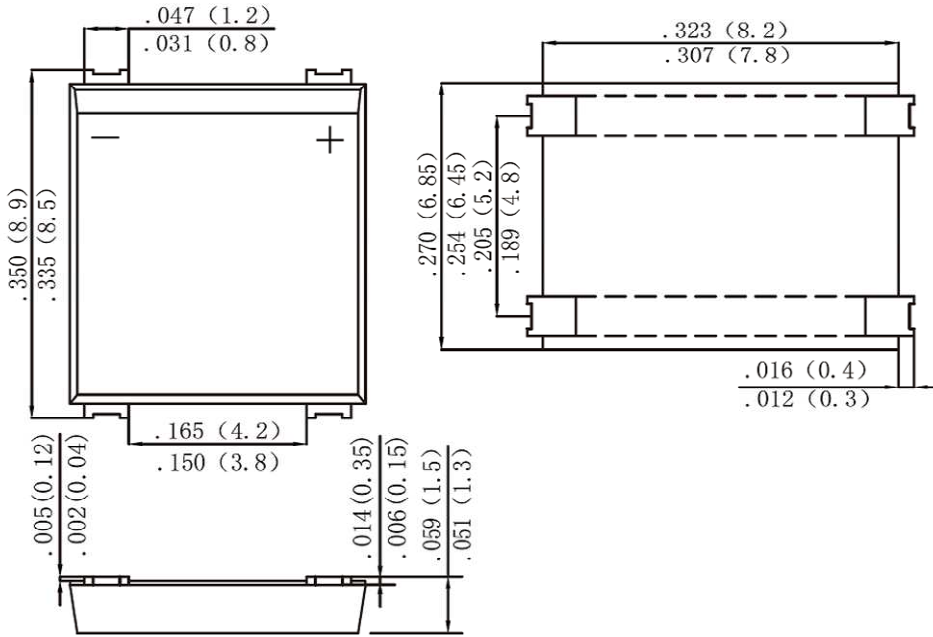
FIG. 5-Typical Junction Capacitance





**SURFACE MOUNT GLASS
PASSIVATED BRIDGE RECTIFIER**

Package Outline Dimensions

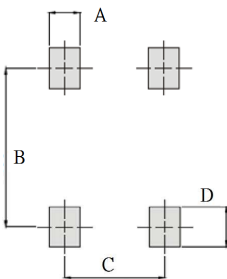


DBF

Dimensions in inches and (millimeters)

Suggested Pad Layout

Outline Symbol	DBF millimeters
A	1.40
B	7.60
C	5.00
D	1.60
E	-
F	-



Tape & Reel Specification

Item	Symbol	Dimension (mm)
Carrier width	A	6.9±0.10
Carrier length	B	10.5±0.10
Carrier depth	C	2.7±0.10
Sprocket hole	d	1.55±0.10
Reel outside diameter	D	330±2
Reel inner diameter	D1	100±1
Feed hole width	D2	21±1
Sprocket hole position	E	1.75 ±0.10
Punch hole position	F	7.5±0.10
Punch hole pitch	P	8.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00 ±0.10
Tape width	W	16.00+0.3/-0.1
Reel width	W1	16.40±1

