

DB151S THRU DB157S

DBS 1.5 AMP Plastic-Encapsulate Bridge Rectifier

DBS Plastic-Encapsulate Bridge Rectifier

Features

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

Applications

General purpose 1 phase Bridgerectifier applications

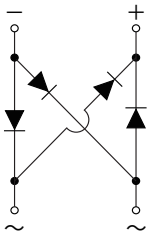
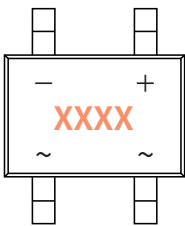
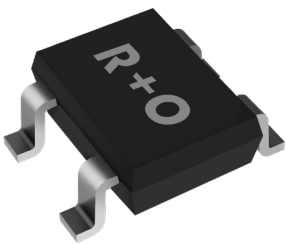
Mechanical Data

- Case: DBS
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

Function Diagram

Reverse Voltage
50-1000 V
Forward Current
1.5 Ampere

DBS



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S
Device marking code			DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	1.5						
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	50						
Rating for fusing (t=8.3ms, Ta=25 °C)	I^2t	A ² S	10.38						
Storage temperature	T_{stg}	°C	-55 ~ +150						
Junction temperature	T_j	°C	-55 ~ +150						
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	58						
	$R_{\theta J-L}$	°C /W	15						

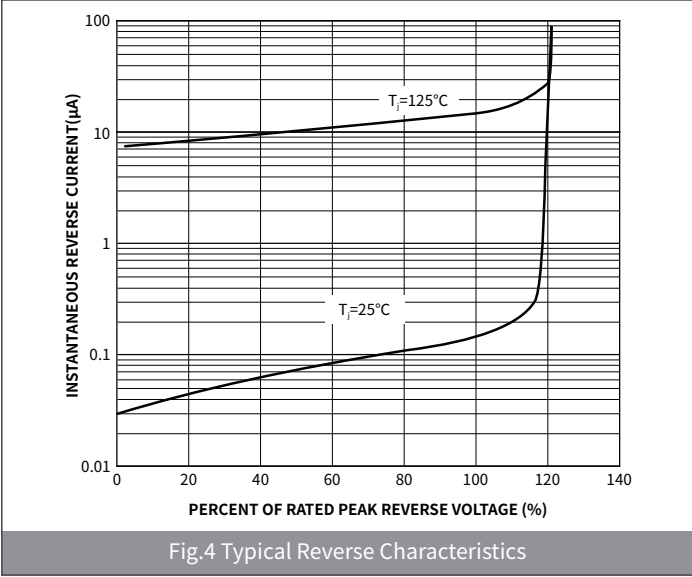
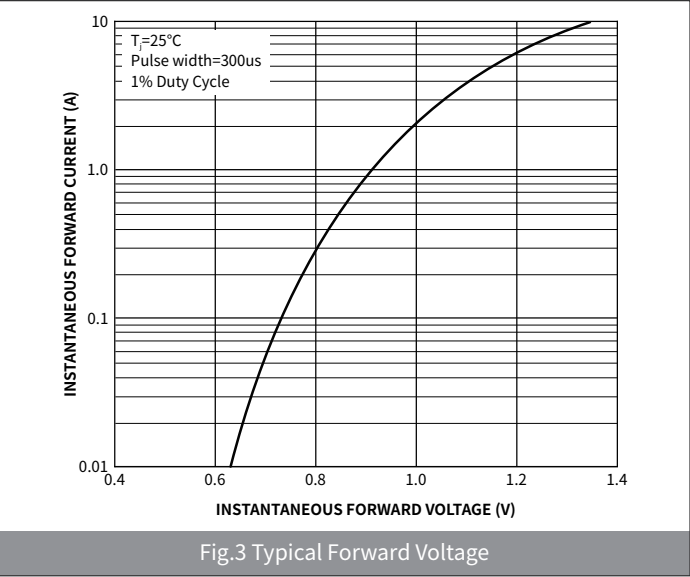
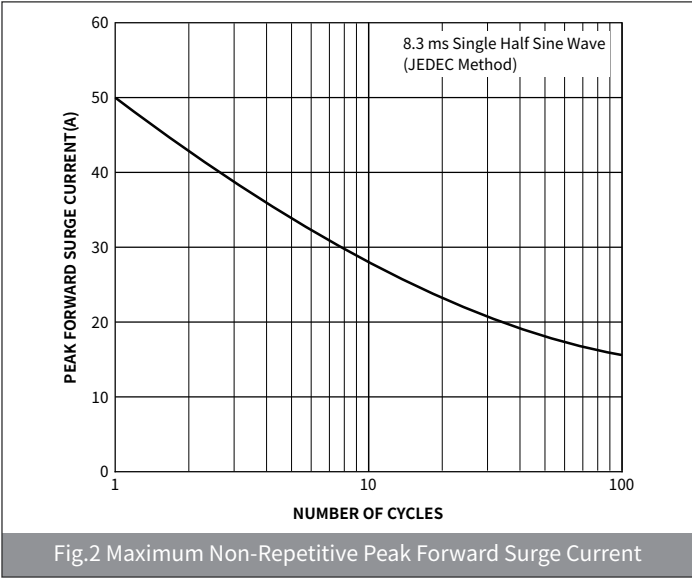
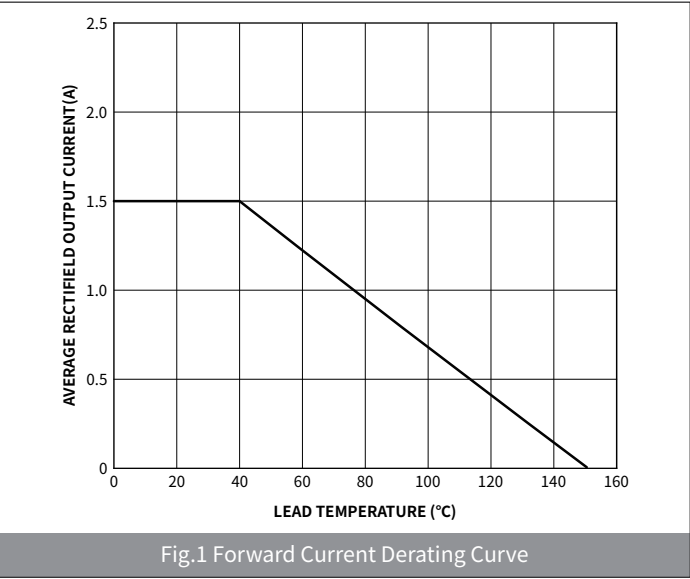
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● **Electrical Characteristics** (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S
Maximum instantaneous forward voltage	$I_F=1.5A$	V_F	V	1.1						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	μA	10						
	$V_R=V_{DC}, T_A=100^{\circ}C$	I_{R2}		500						
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	25						

● **Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)



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Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
DBS	R3	1500	3000	21000	13"

Package Outline Dimensions (DBS)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	6.20	6.50	0.244	0.256
B	8.13	8.51	0.320	0.335
C	9.60	10.30	0.378	0.406
D	5.00	5.20	0.197	0.205
E	1.80	2.10	0.071	0.083
F	0.08	0.33	0.003	0.013
G	1.02	1.53	0.040	0.060
H	0.22	0.33	0.009	0.013
J	1.02	1.20	0.040	0.047
K	2.80	3.30	0.110	0.130
θ	-	45°	-	45°

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
N	8.68	8.78	0.342	0.346
M	5.07	5.17	0.200	0.204
X	2.17	2.27	0.085	0.089
Y	1.15	1.25	0.045	0.049