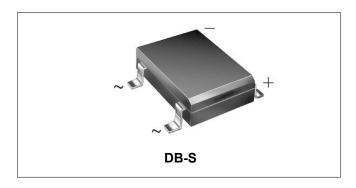






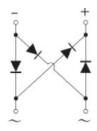
DB151S THRU DB157S SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIERS



Features

- Glass passivated die construction
- Low forward voltage drop
- · High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- · Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: DB-S, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Lead Free: For RoHS / Lead Free Version,

Maximum Ratings @T_A=25°C unless otherwise specified

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Characteristic	Symbol	DB 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Forward Output Current (Note 1) @ T _C =100°C	I _{F(AV)}	1.5				А			
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	55				А			
I ² t Rating for Fusing (t < 8.3ms)	l²t	12.6					A ² s		

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Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	DB 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	Units
Maximum Forward Voltage Drop* per Bridge Element @I _F =1.5A, T _J =25°C	V _F	1.0			V				
Peak Reverse Current* @T _A = 25°C At Rated DC Blocking Voltage* @T _A = 125°C	I _R	5 200			μA				
Typical Junction Capacitance (Note 2)	CJ	25			pF				

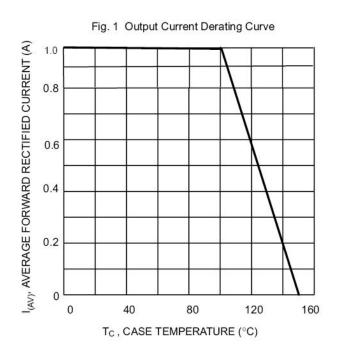
^{*} Pulse width < 300 μ s, duty cycle < 2%

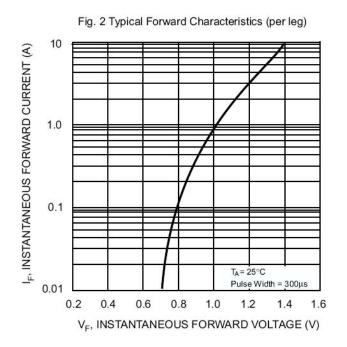
Thermal-Mechanical Specifications @TA=25°C unless otherwise specified

Characteristic	Symbol	DB 151S	DB 152S	DB 153S	DB 154S	DB 155S	DB 156S	DB 157S	Units
Typical Thermal Resistance Junction to Ambient	R _{0JA}	40			°C/W				
Typical Thermal Resistance Junction to Lead	R _{0JL}	л. 15			°C/W				
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to + 150		°C					

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

Ratings and Characteristics Curves





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^{2.} Measured at 1.0 MHZ and applied reverse voltage of 4.0 VDC





Fig. 3 Maximum Peak Forward Surge Current (per leg)

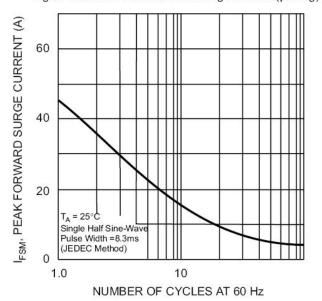


Fig. 4 Typical Reverse Characteristics (per element)

100

T_J= 125°C

10

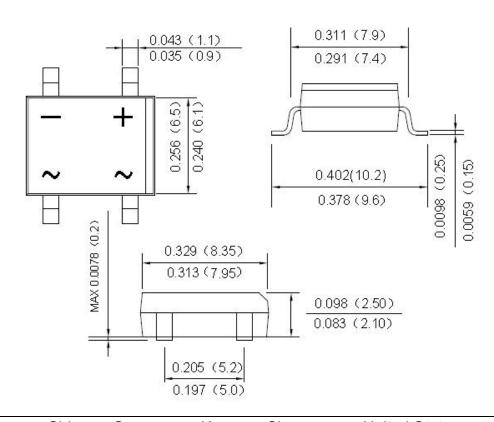
T_J= 25°C

0.01

0 20 40 60 80 100 120 140

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

Mechanical Dimensions DB-S(Inches/Millimeters)



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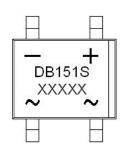


Ordering Information

Device	Package	Plating	Shipping
DB151S THRU DB157S	DB-S (Pb-Free)	Pure Sn	1500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



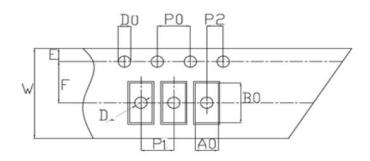
Where XXXXX is YYWWL

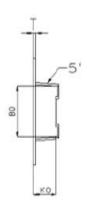
DB151S = Type Number
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

Carrier Tape Specification DB-S





SYMBOL	Millimeters					
STWBOL	Min.	Max.				
A0	8.65	8.95				
В0	10.31	10.51				
D0	1.50	1.60				
D1	1.40	1.60				
P0	3.90	4.10				
P1	11.90	12.10				
P2	1.90	2.10				
Е	1.65	1.85				
K0	3.21	3.41				
F	7.40	7.60				
W	15.70	16.30				
Т	0.30	0.40				
10P0	39.80	40.20				



DB151S THRU DB157S

Technical Data Data Sheet N1476, Rev. C





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