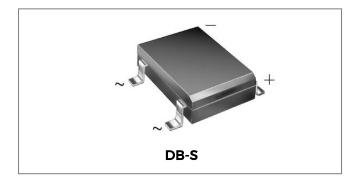






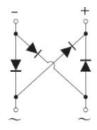
DB201S THRU DB207S SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIERS



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@TA=25°C unless otherwise specified

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

Characteristic	Symbol	DB 201S	DB 202S	DB 203S	DB 204S	DB 205S	DB 206S	DB 207S	Unit
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) @ $T_A = 40^{\circ}C$	I _{F(AV)}				2.0	,	,	,	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				60				A







Electrical Characteristics:

Characteristic	Symbol	DB 201S	DB 202S	DB 203S	DB 204S	DB 205S	DB 206S	DB 207S	Unit
Maximum Forward Voltage Drop per Bridge Element $@l_F = 2.0A$, $T_A = 25$ °C	V _F				1.1				V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	I _R				5 500				μΑ
Typical Junction Capacitance (Note 2)	C₃				25				pF

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

Thermal-Mechanical Specifications:

Characteristic	Symbol	DB 201S	DB 202S	DB 203S	DB 204S	DB 205S	DB 206S	DB 207S	Unit
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	40					°C/W		
Typical Thermal Resistance Junction to Lead	R ₀ JL	R _{(1)L} 15			°C/W				
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55+150			°C				

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

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

Ratings and Characteristics Curves

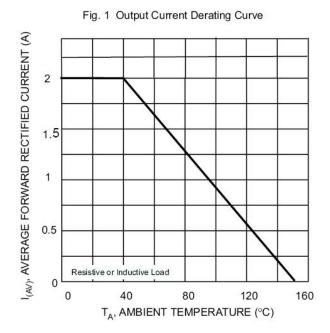


Fig. 2 Typical Forward Characteristics (per leg)

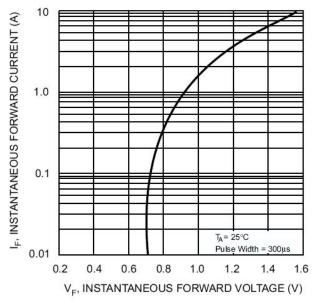






Fig. 3 Maximum Peak Forward Surge Current (per leg)

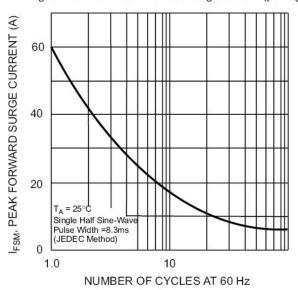


Fig. 4 T ypical Reverse Characteristics (per element)

100

T_J= 125°C

1.0

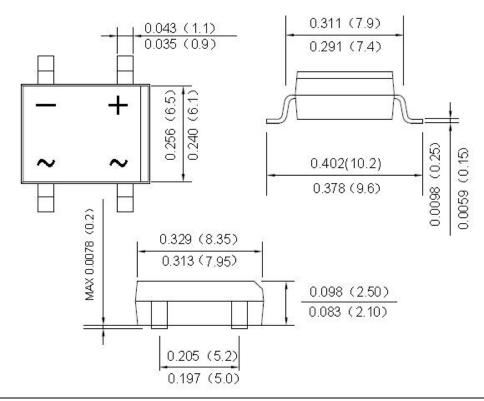
T_J= 25°C

0.01

0 20 40 60 80 100 120 140

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

Mechanical Dimensions DB-S(Inches/Millimeters)







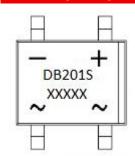


Ordering Information

Device	Package	Plating	Shipping
DB201S THRU DB207S	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



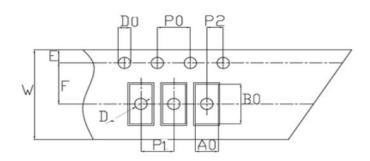
Where XXXXX is YYWWL

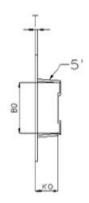
DB201S = Type Number
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin

Epoxv resin UL:94V-0

Carrier Tape Specification DB-S





SYMBOL	Millimeters					
STMBOL	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				
E	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				









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