MLSM MICROELECTRONICS

DB301S THRU DB307S

Bridge Rectifiers

Features

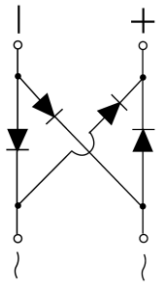
•Glass passivated chip
•High surge current capability
•Ldeal for surface mounted applications
•Low power loss, high efficiency
•Plastic Case Material has UL Flammability

Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.



DBS top view



Schematic diagram

Marking

•DB30XS
X : From 1 To 7

Pb-Free RoHS Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Test Conditions	DB30XS							Unit
			1	2	3	4	5	6	7	
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS voltage		35	70	140	280	420	560	700	V
V_{DC}	Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
$I_{O(AV)}$	Average Forward Current	60Hz Half-sine wave Resistance load	3							A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave，1 cycle，Ta=25℃	80							A
V_F	Maximum Instantaneous Forward Voltage at 3A		1.1							V
I_R	Maximum DC Reverse Current Ta = 25 °C		5							μA
	at Rated DC Blocking Voltage Ta =100 °C		100							
$R_{\Theta JA}$	Typical Thermal Resistance		75							°C/W
T_j,T_{stg}	Operating and Storage Temperature Range		-55~+150							°C

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Typical Characteristics

Fig.1 Forward Current Derating Curve

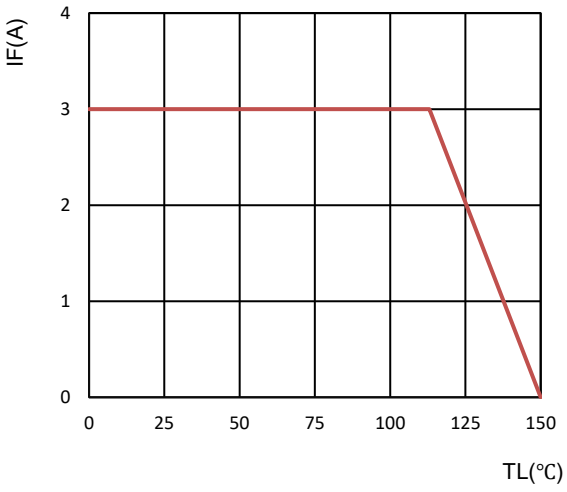


Fig.2 Surge Forward Current Capability

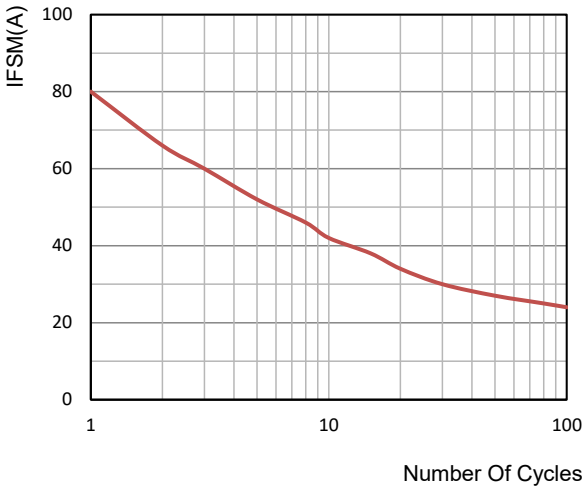


Fig.3 Typical Forward Voltage

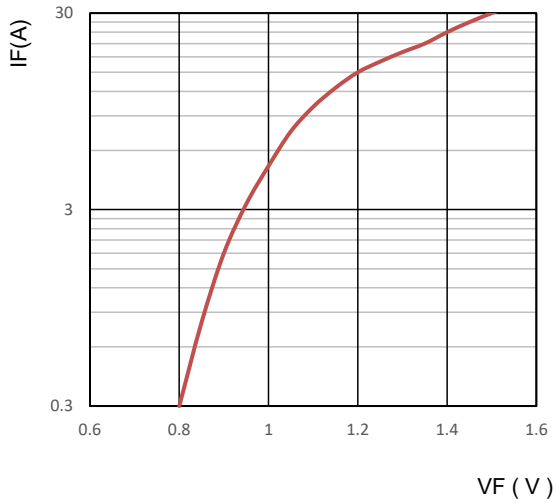
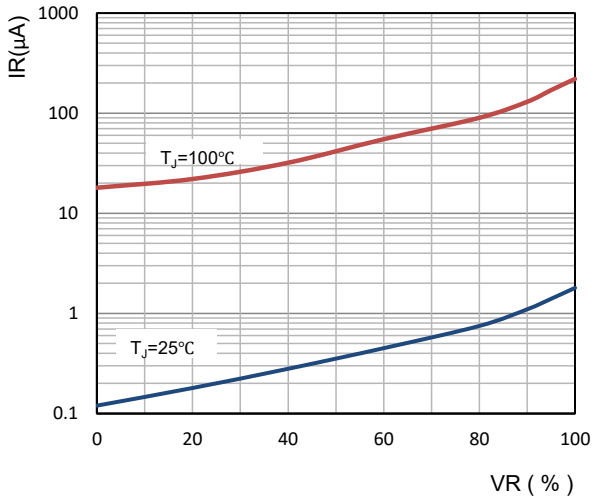


Fig.4 Typical Reverse Characteristics

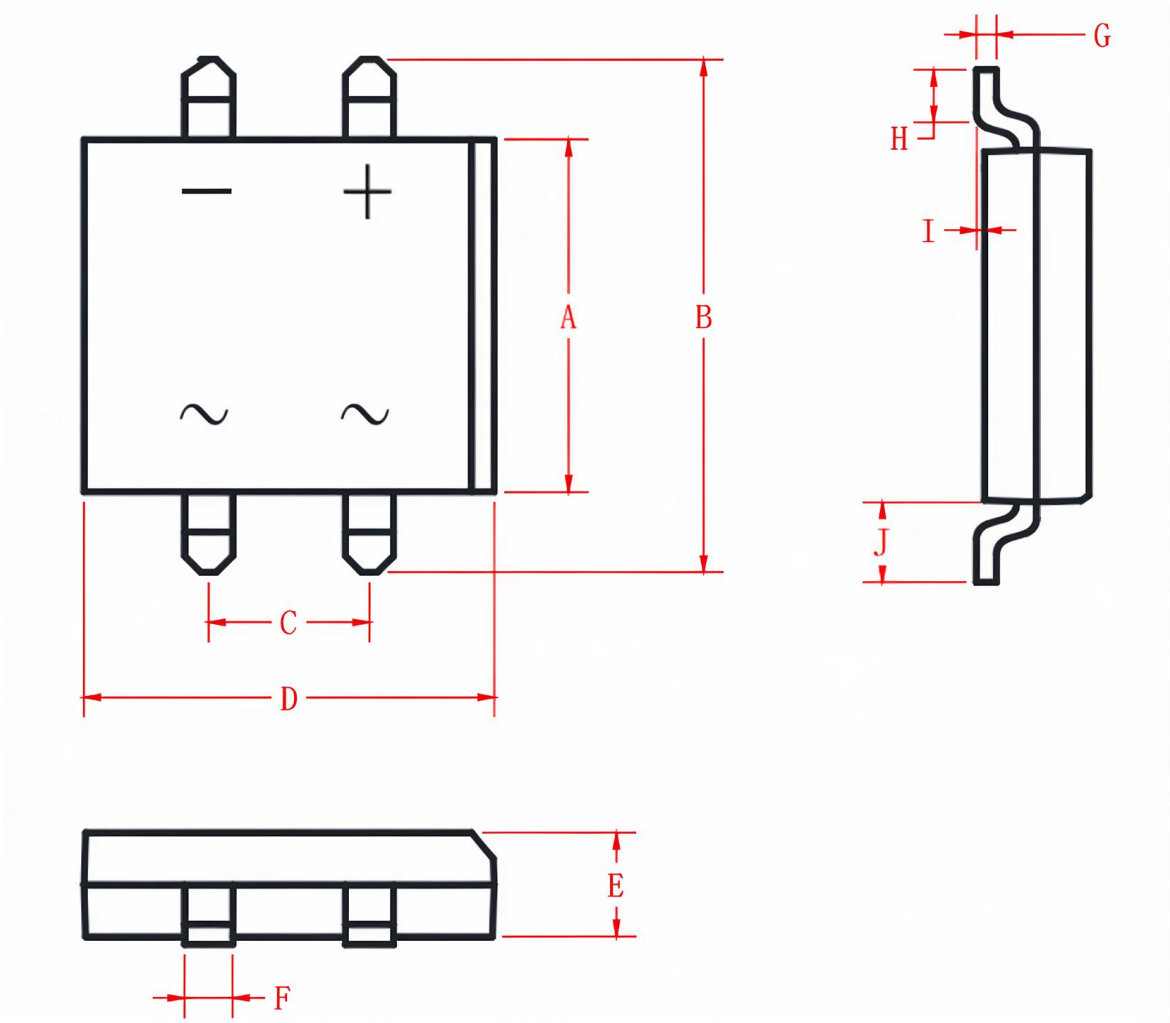


Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
DB301S	DBS	DB301S	1,500	3,000	21,000	13"reel
DB302S		DB302S				
DB303S		DB303S				
DB304S		DB304S				
DB305S		DB305S				
DB306S		DB306S				
DB307S		DB307S				

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DBS Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	6.100	6.500	0.240	0.256
B	9.500	9.900	0.374	0.389
C	4.800	5.200	0.189	0.205
D	7.950	8.350	0.313	0.328
E	2.300	2.700	0.090	0.106
F	0.900	1.200	0.035	0.047
G	0.220	0.330	0.009	0.013
H	1.02	1.530	0.040	0.060
I	0.076	0.330	0.003	0.013
J	1.800	2.100	0.071	0.083

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