

■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

■ Applications

- General purpose use in AC/DC bridge full wave rectification

■ Mechanical Data

- Case: DBS
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



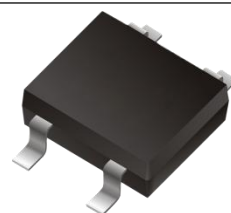
Reverse Voltage

50-1000 V

Forward Current

3.0 A max

Appearance Image



■ Marking

- DB3xxS(01~07)

■ Maximum Ratings @ Ta = 25°C unless otherwise noted

PARAMETER	SYMBOL	UNIT	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S
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 output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	3.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	80						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	160						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A²S	25.56						
Storage temperature	T_{stg}	°C	-55~+150						
Junction temperature	T_j	°C	-55~+150						

■ Electrical Characteristics @ Ta = 25°C unless otherwise noted

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S
Maximum instantaneous forward voltage	$I_F=1.5A$	V_F	V	1.0						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, Tj=25°C	I_R	μA	5						
	$V_R=V_{DC}$, Tj=100°C	I_R		100						

■ **Characteristic Curve (Typical)**

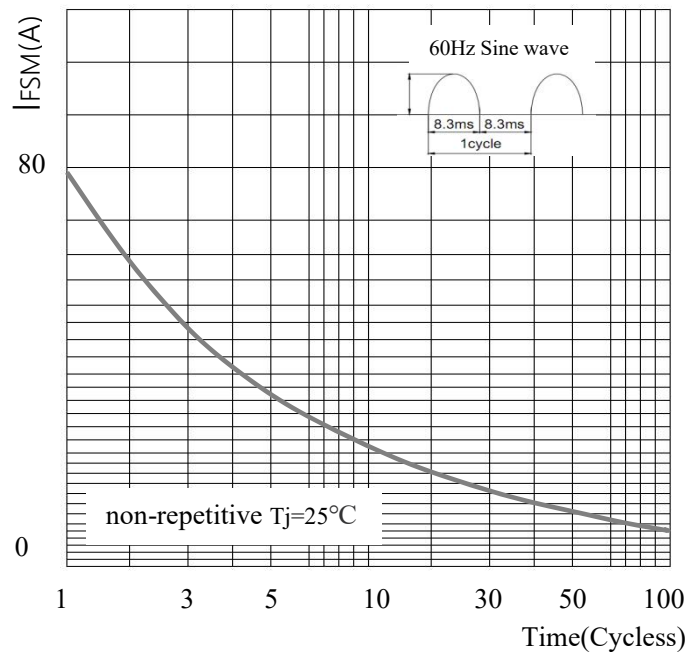
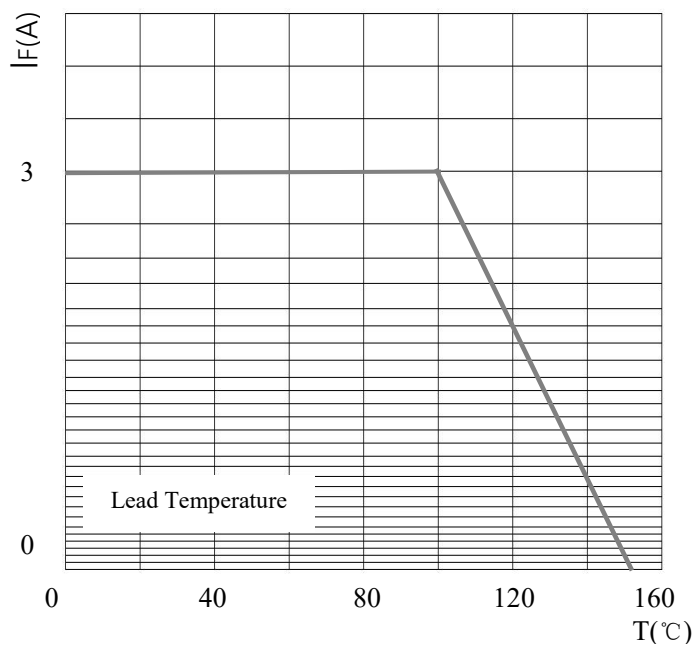


FIG1. Derating Curve For Output Rectified Current

FIG2. Surge Forward Current Capability

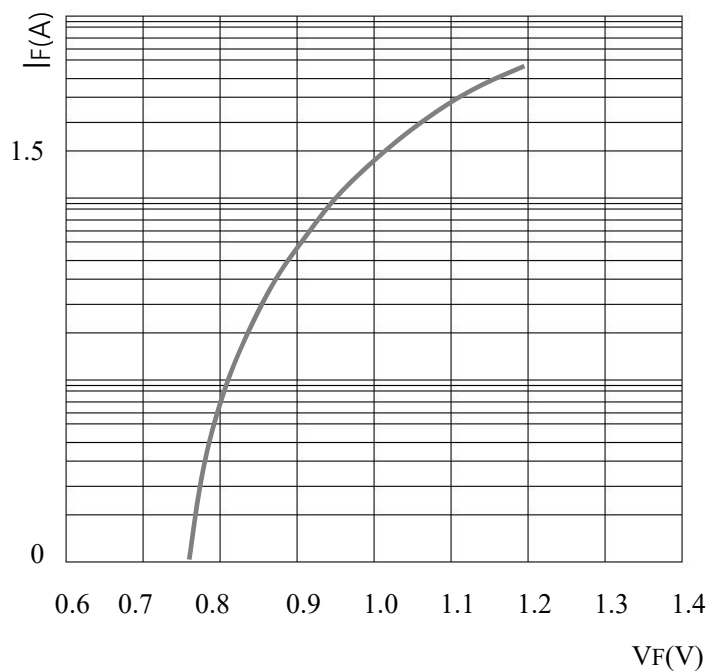


FIG3. Typical Forward Characteristics

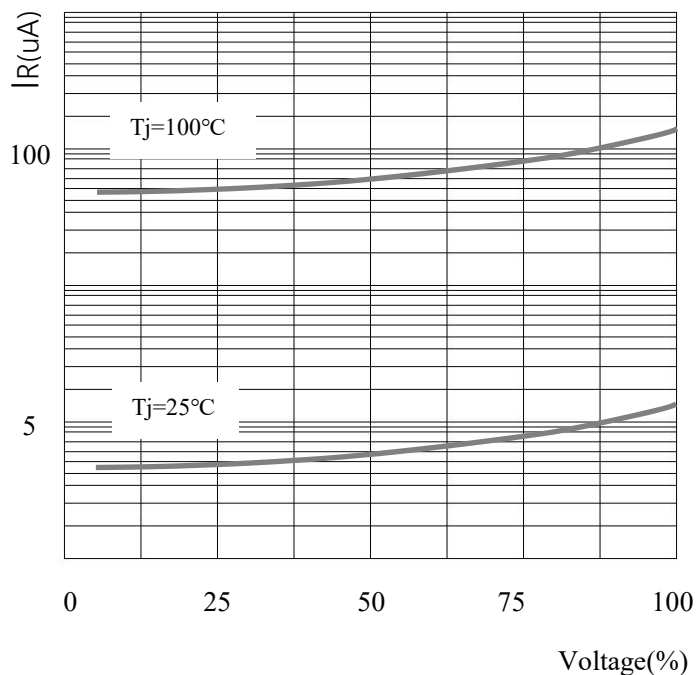
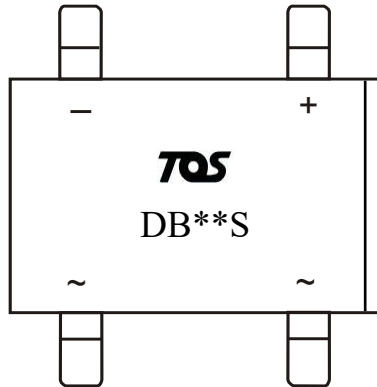


FIG4. Typical Reverse Characteristics

Marking and packet information



DB***S: Product Type Code **TOS** : Brand Loge

Packaging information	
Reel	1500PCS
Carton	27000PCS
Reel Size	13"

DBS Package outline dimensions

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	1.0	1.5	0.039	0.059
H	0.18	0.22	0.007	0.009
J	1.02	1.20	0.040	0.047
K	2.80	3.30	0.110	0.130
θ	-	45°	-	45°

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