

■ 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: DBM
- 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



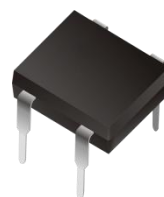
Reverse Voltage

50-1000 V

Forward Current

1.0 A max

Appearance Image



■ Marking

- DB1xx(01~07)

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

PARAMETER	SYMBOL	UNIT	DB101	DB102	DB103	DB104	DB105	DB106	DB107
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	1.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	40						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	80						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A²S	6.64						
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	DB101	DB102	DB103	DB104	DB105	DB106	DB107
Maximum instantaneous forward voltage	$I_F=0.5A$	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)

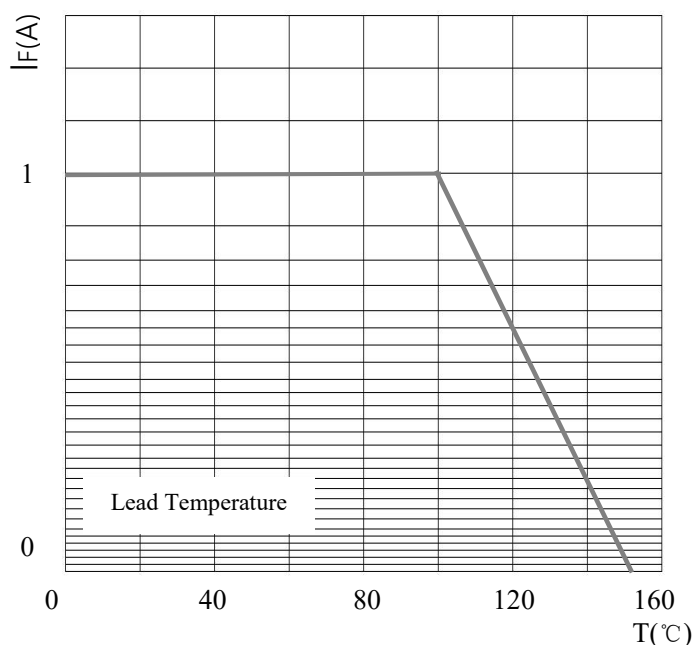


FIG1. Derating Curve For Output Rectified Current

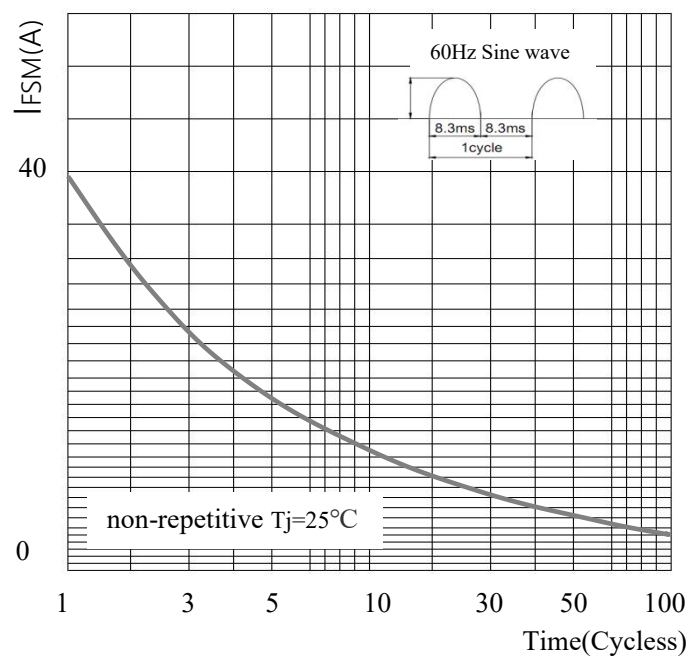


FIG2. Surge Forward Current Capability

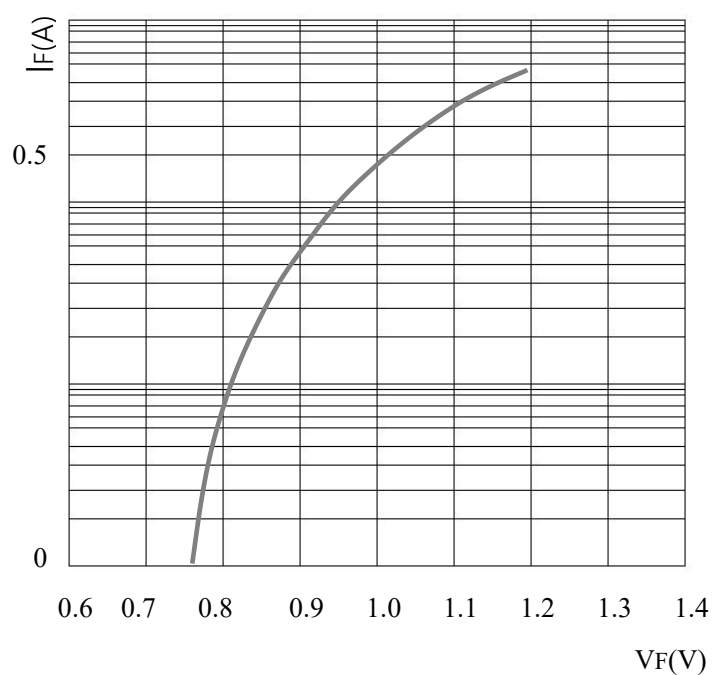


FIG3. Typical Forward Characteristics

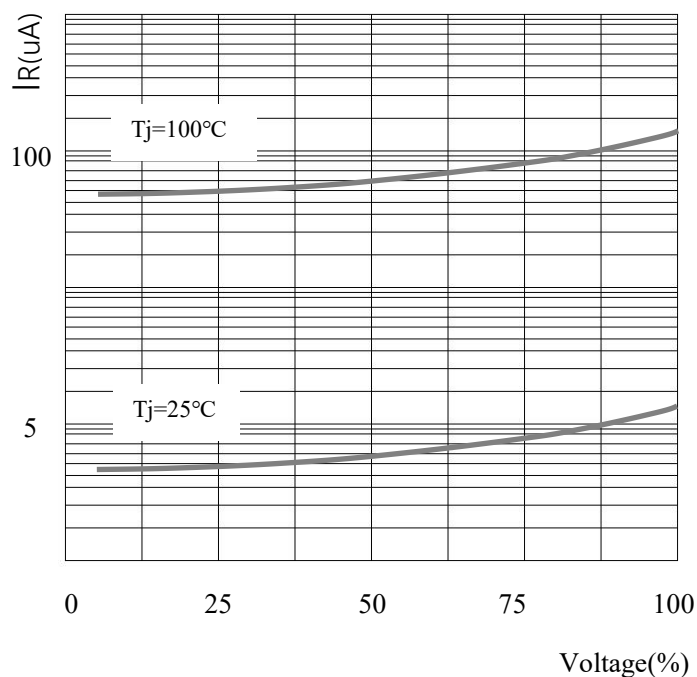
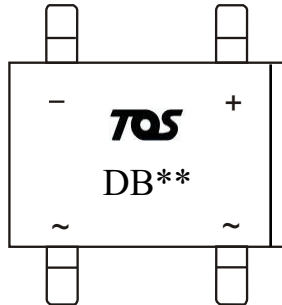


FIG4. Typical Reverse Characteristics

■ Marking and packet information



DIP Vertical View

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

Packaging information	
Tube	50PCS
Box	2500PCS
Carton	10000PCS

■ DBM Package outline dimensions

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	6.20	6.50	0.244	0.256
B	7.95	8.35	0.313	0.329
C	5.00	5.20	0.197	0.205
D	0.95	1.15	0.037	0.045
E	1.39	1.9	0.055	0.074
e	0.46	0.58	0.018	0.023
F	2.80	3.3	0.110	0.130
G	1.27	2.03	0.050	0.800
H	7.24	8.00	0.285	0.315
I	7.6	8.9	0.300	0.350
J	0.18	0.33	0.007	0.013
K	3.81	4.69	0.15	0.185

■ Notice

XILONG reserves the right to make modifications,enhancements,improvements,corrections or other changes without further notice to any product herein.
xilong does not assume any liability arising out of the application or use of any product described herein.