

■ **Features**

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

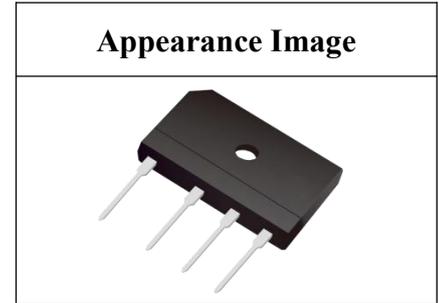
<b>Reverse Voltage</b> 50-1000 V
<b>Forward Current</b> 50.0 A max

■ **Applications**

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

■ **Mechanical Data**

- Case: 6GBJ
- 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



■ **Marking**

- D50SBxxx(10~120)

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

PARAMETER	SYMBOL	UNIT	D50SB10	D50SB20	D50SB40	D50SB60	D50SB80	D50SB100	D50SB120
Repetitive peak reverse voltage	$V_{RRM}$	V	100	200	400	600	800	1000	1200
Maximum RMS voltage	$V_{RMS}$	V	70	140	280	420	560	700	840
Maximum DC blocking Voltage	$V_{DC}$	V	100	200	400	600	800	1000	1200
Maximum average output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	50.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	$I_{FSM}$	A	500						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	1000						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	$I^2t$	A²S	1037.50						
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	D50SB10	D50SB20	D50SB40	D50SB60	D50SB80	D50SB100	D50SB120
Maximum instantaneous forward voltage	$I_F=25.0A$	$V_F$	V	1.0						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_j=25°C$	$I_R$	μA	10						
	$V_R=V_{DC}, T_j=100°C$	$I_R$		500						

■ **Characteristic Curve (Typical)**

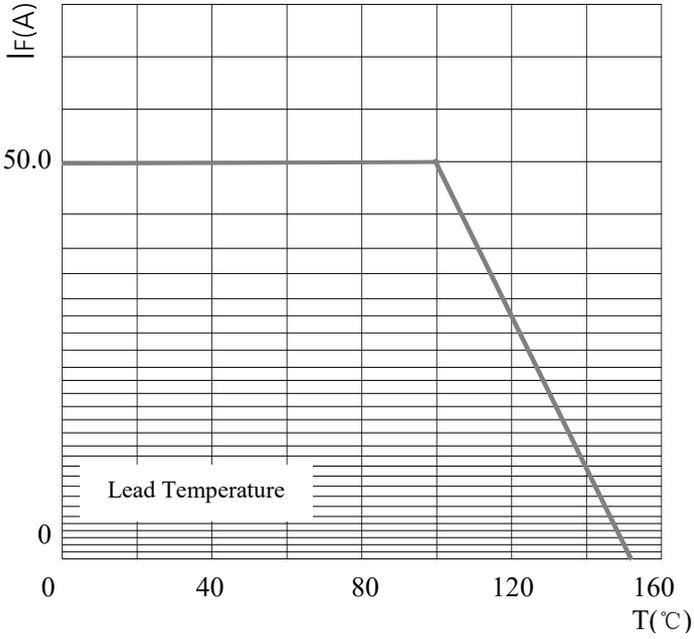


FIG1. Derating Curve For Output Rectified Current

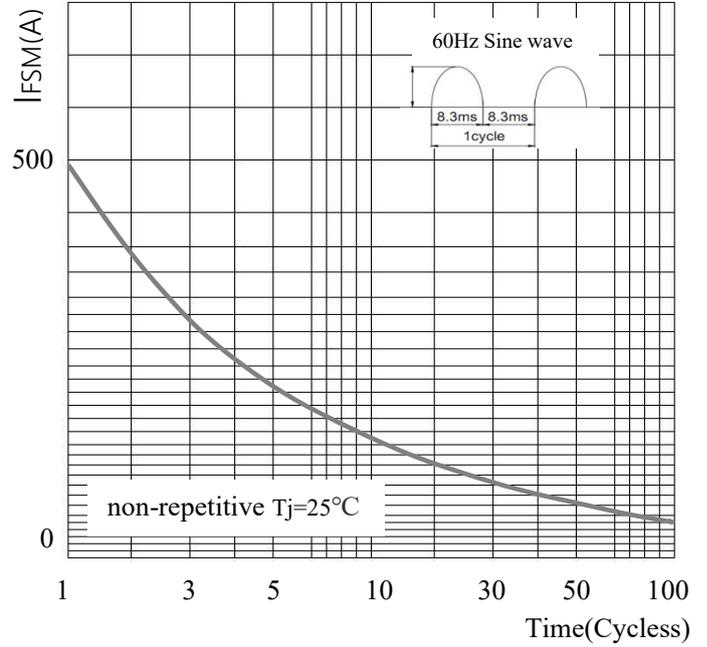


FIG2. Surge Forward Current Capability

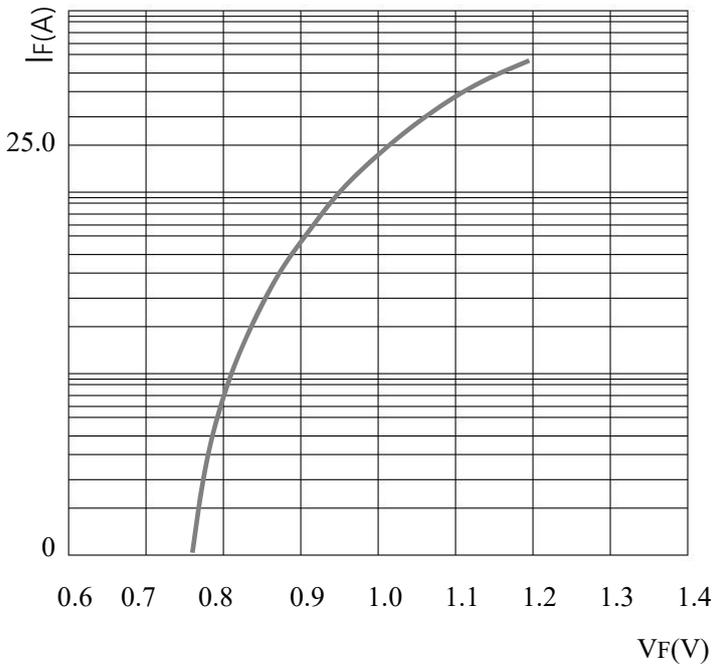


FIG3. Typical Forward Characteristics

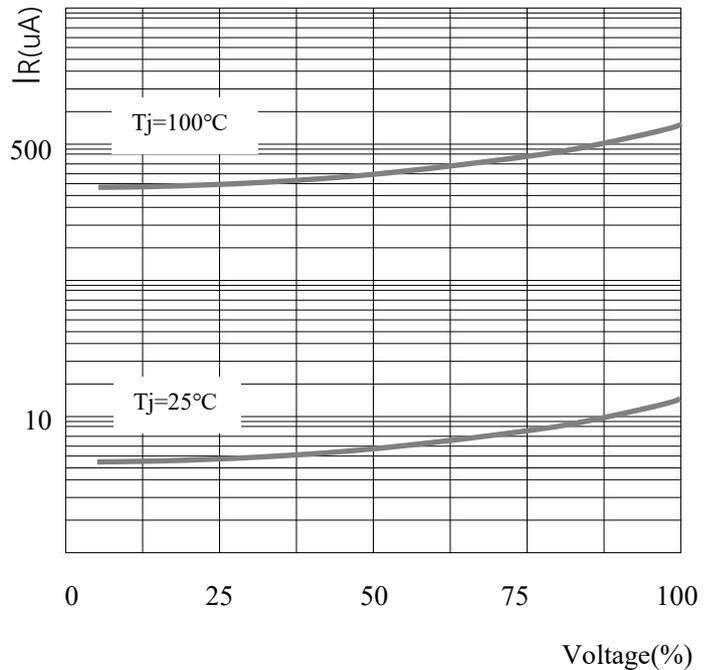
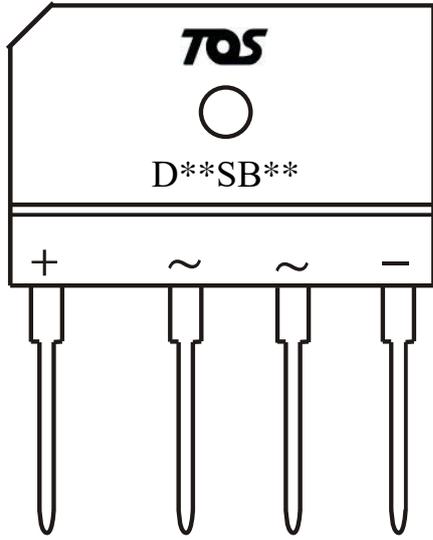


FIG4. Typical Reverse Characteristics

■ **Marking and packet information**

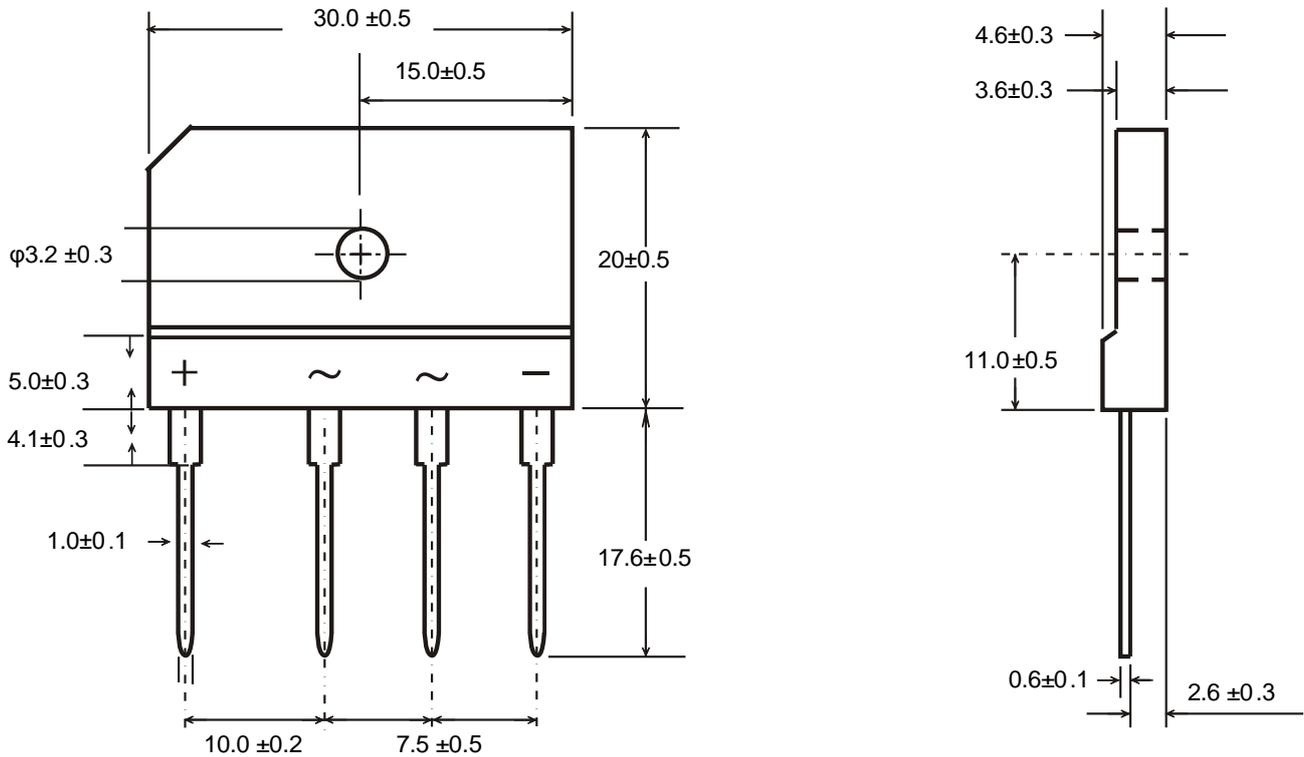


D\*\*SB\*\* : Marking Model

**TOS** : Brand Logo

Packaging information	
每盒	250PCS
每箱	2000PCS
脚长定制	支持

■ **6GBJ Package outline dimensions**



Dimensions in millimeters

■ **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.