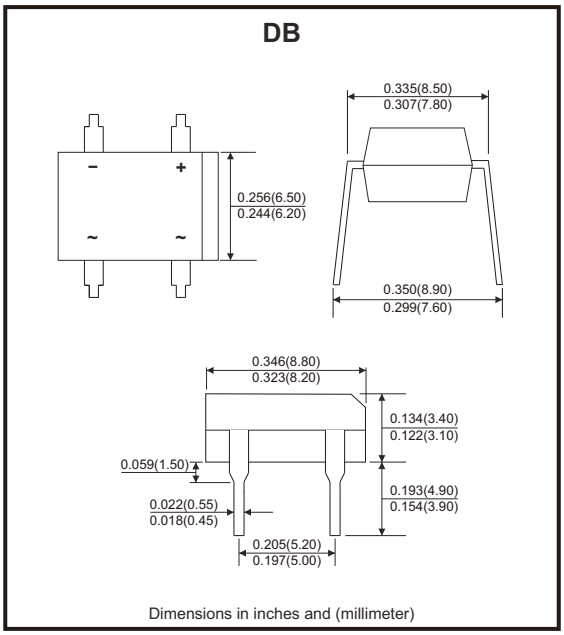
DB101-G Thru. DB107-G

Reverse Voltage: 50 to 1000V
Forward Current: 1.0A
RoHS Device

Features

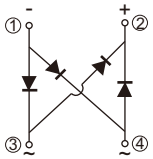
- Glass passivated chip.
- High surge forward current capability.
- Reliable low cost construction utilizing molded plastic technique.
- Lead in plated copper.
- UL recognized file # E349301



Mechanical Data

- Case: DB, molded plastic.
- Polarity: Symbol marked on body.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbol	DB 101-G	DB 102-G	DB 103-G	DB 104-G	DB 105-G	DB 106-G	DB 107-G	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ T_A=40°C	$I_{(AV)}$	1.0							A
Peak forward surge current, 8.3ms single half sine-wave, superimposed on rated load (JEDEC method)	I_{FSM}	30							A
I^2t rating for fusing (t<8.3ms)	I^2t	3.7							A^2s
Peak forward voltage per diode at 1.0A DC	V_F	1.1							V
Maximum DC reverse current at rated @T_J=25°C DC blocking voltage per diode @T_J=125°C	I_R	10 500							μA
Typical junction capacitance (Note 1)	C_J	25							pF
Typical thermal resistance junction to ambient (Note 2)	$R_{\theta JA}$	40							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Notes: 1. Measured at 1MHz and applied reverse voltage of 4V DC.
2. Thermal resistance from junction to ambient mounted on P.C.B , with 0.5x0.5"(13x13mm) copper pads.
3. The typical data above is for reference only.

Rating and Characteristics Curves (DB101-G Thru. DB107-G)

Fig.1 - Forward Current Derating Curve

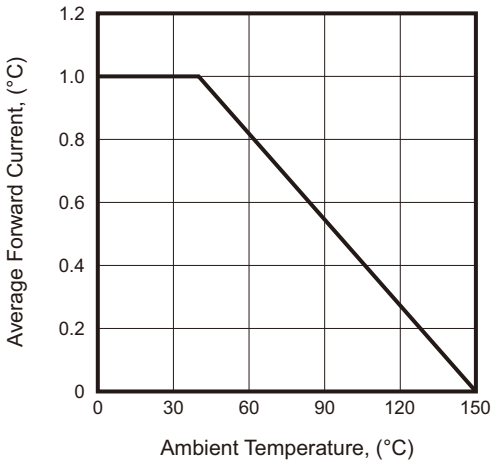


Fig.2 - Maximum Non-Repetitive Surge Current

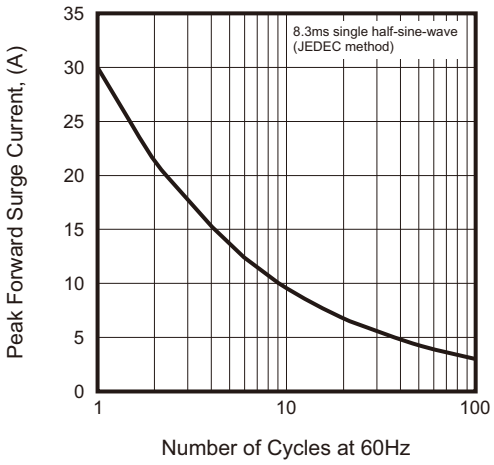


Fig.3 - Typical Reverse Characteristics

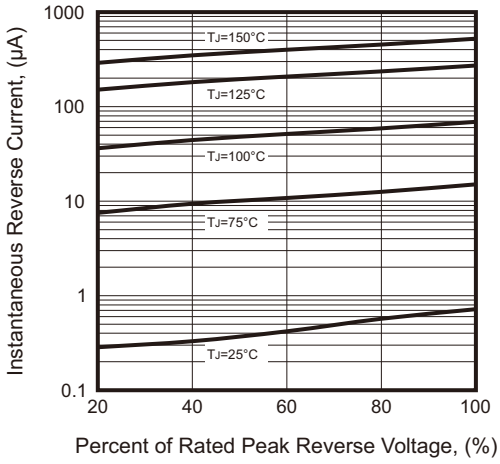


Fig.4 - Typical Forward Characteristics

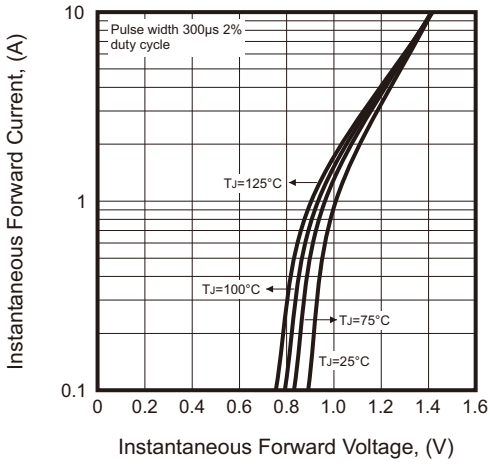
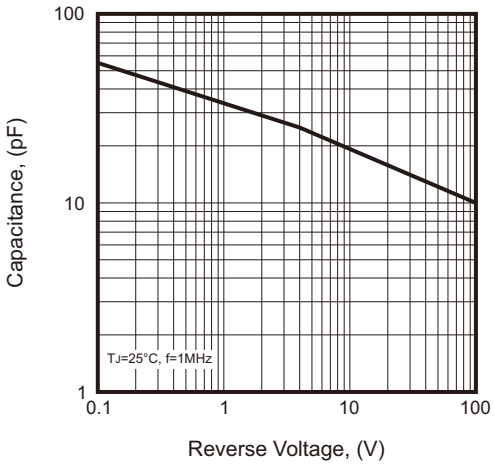
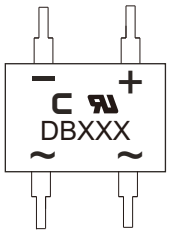


Fig.5 - Typical Junction Capacitance



Marking Code

Part Number	Marking code
DB101-G	DB101
DB102-G	DB102
DB103-G	DB103
DB104-G	DB104
DB105-G	DB105
DB106-G	DB106
DB107-G	DB107



XXX = Product type marking code

⊂ = Comchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
DB	50	2,500