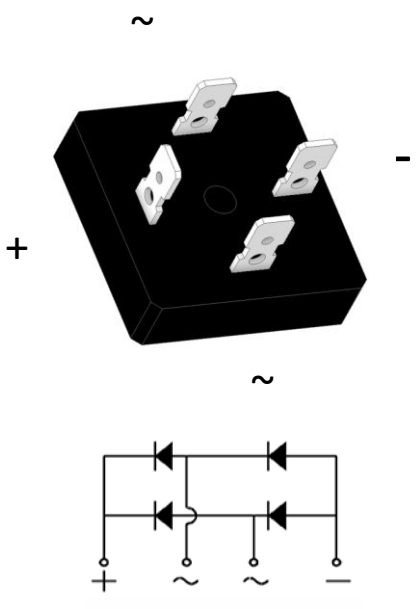
Bridge Rectifiers



Features

- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

Mechanical Data

- **Package**: S75VB
  Molding compound meets UL 94 V-0 flammability rating
- **Terminals**: Nickel plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	S75VB100
Device marking code				S75VB100
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	1000
Maximum RMS Voltage		V_{RMS}	V	700
Maximum DC blocking Voltage		V_{DC}	V	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =85℃	I_O	A	75
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	700
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	2034
Storage temperature		T_{stg}	℃	-55 ~ +150
Junction temperature		T_j	℃	-55 ~ +150
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	KV	2.5
Mounting torque @Recommend torque：5kg·cm		Tor	kg·cm	8

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	S75VB100
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=37.5A	1.1
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25℃	5
			T_j=125℃	500
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	400

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	S75VB100
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	18.0
	Between junction and case, With heatsink	$R_{\theta J-C}$		0.8

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
S75VB100	A1	Approximate 30	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

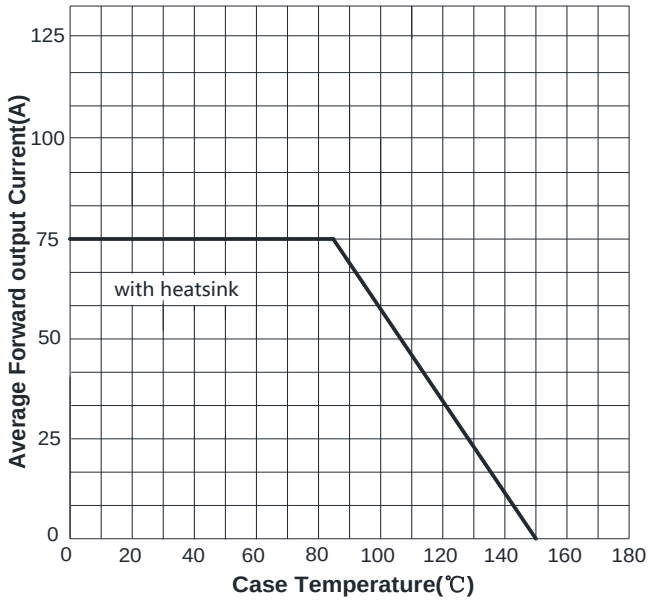


FIG2:Surge Forward Current Capability

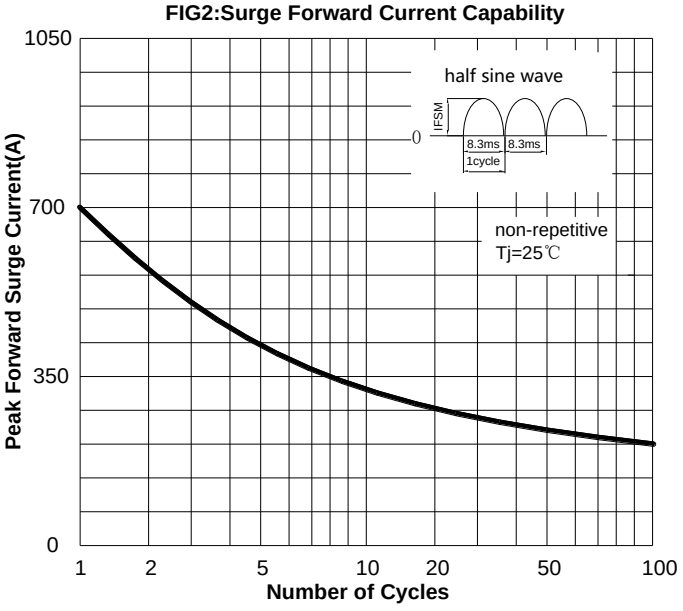


FIG3: Typical Forward Voltage

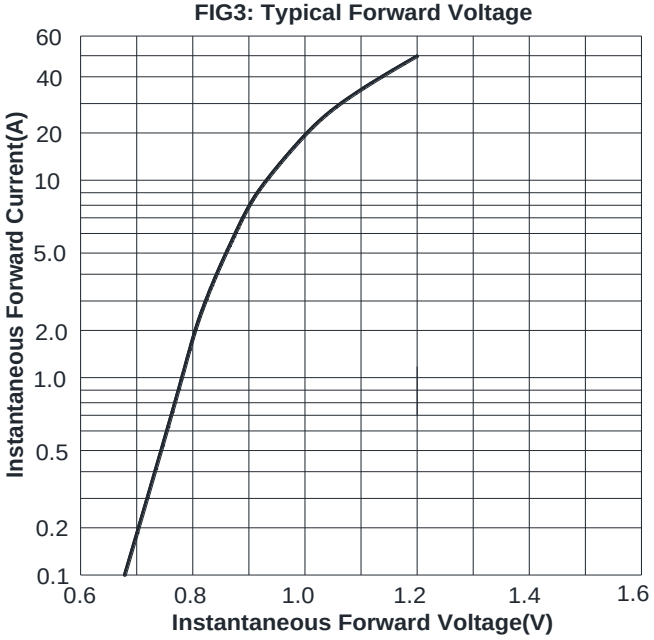
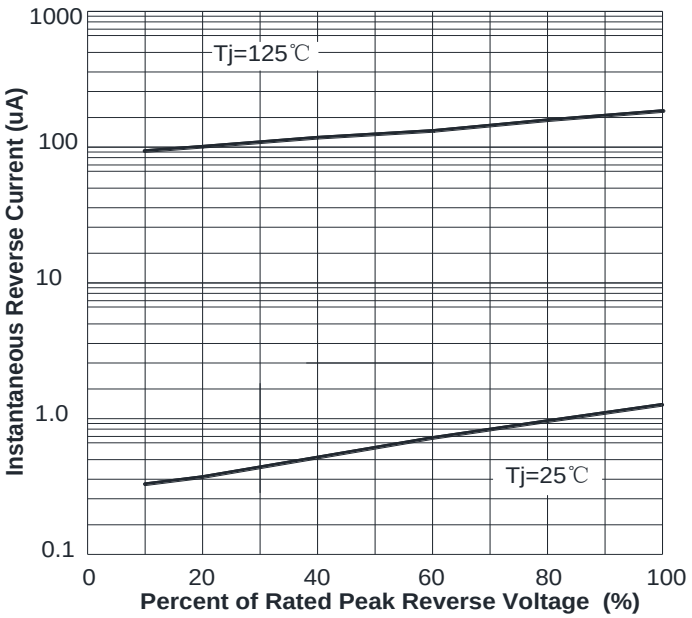
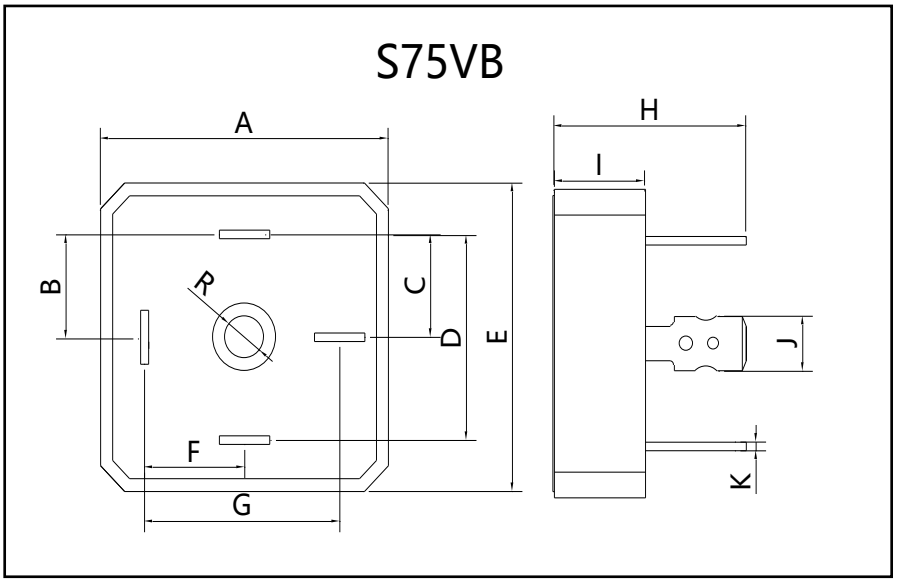


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



S75VB		
Dim	**Min**	**Max**
A	35.5	36.5
B	12.0	13.0
C	11.7	12.7
D	24.5	25.5
E	35.5	36.5
F	12.1	13.1
G	23.7	24.7
H	22.0	24.0
I	11.2	12.2
J	6.05	6.55
K	0.6	1.0
R	4.5	5.5

Notice

All products, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in STARSEA's terms and conditions of sale for such products, STARSEA assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of STARSEA products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.