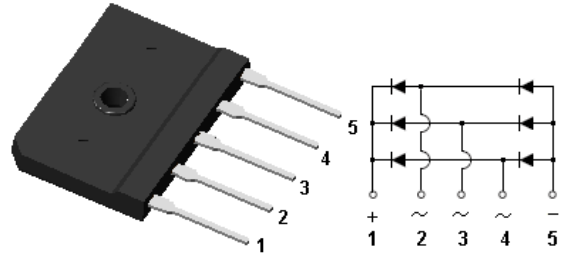


## Glass Passivated Three Phase Bridge Rectifier

### Features

- Ideal for printed circuit board
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- 2500V Isolation ratings
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC



SIP2-5  
(RS:RS-C3)

### Mechanical Date

- **Case:** SIP2-5 (RS-C3) Molded plastic over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002 and JESD22-B102D
- **Polarity:** Polarity symbols marked on body

### Major Ratings and Characteristics

$I_{F(AV)}$	35A
$V_{RRM}$	800V to 1600V
$I_{FSM}$	400 A
$I_R$	10 $\mu$ A
$V_F$	1.3V
$T_{j\ max.}$	150°C

### Maximum Ratings & Thermal Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Items	Symbol	3SRB3508	3SRB3510	3SRB3512	3SRB3516	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	800	1000	1200	1600	V
Maximum RMS voltage	$V_{RMS}$	560	700	840	1120	V
Maximum DC blocking voltage	$V_{DC}$	800	1000	1200	1600	V
Maximum average forward rectified current at $T_c=100^\circ\text{C}$ (With heatsink)	$I_{F(AV)}$	35				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400				A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	664				$\text{A}^2\text{s}$
Isolation Breakdown Voltage(R.M.S) @a.c.50HZ;r.m.s.;1min	$V_{isol}$	2500				V
Thermal resistance junction to case per leg <sup>(1)</sup>	$R_{\theta JC}$	0.96				$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150				$^\circ\text{C}$

Note 1: With heatsink, Thermal resistance test is according to JESD 282b.

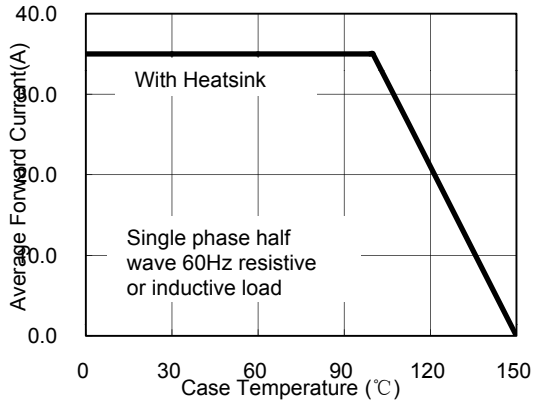
### Electrical Characteristics for Rectifier ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage per leg	$I_F=17.5\text{A}^{(2)}$	$V_F$	-	1.00	1.30	V
Reverse current per leg	$V_R=V_{DC}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	-	-	10 500	$\mu\text{A}$

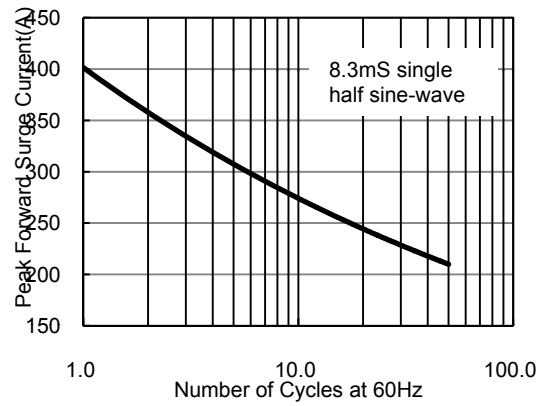
Note2: Pulse test:300 $\mu\text{s}$  pulse width,1% duty circle.

### Characteristic Curves

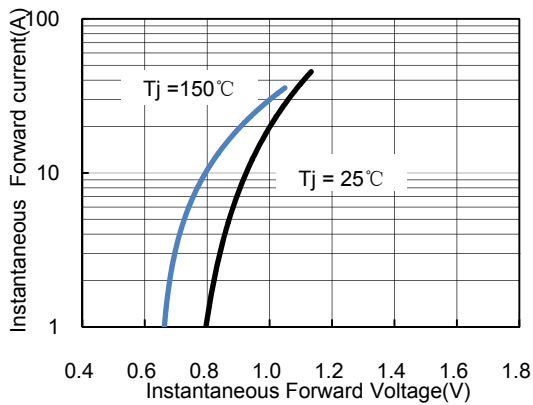
**Fig.1 Forward Current Derating Curve**



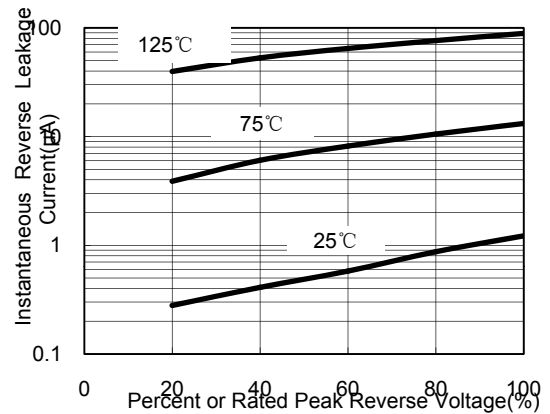
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**

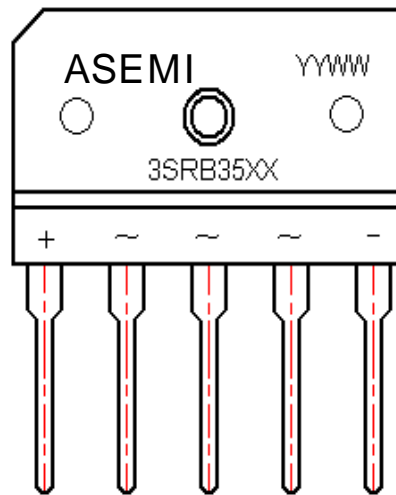


**Fig.4 Typical Reverse Leakage Characteristics**



## Glass Passivated Three Phase Bridge Rectifier

### Marking



ASEMI = Trademark  
 YYWW = Year And Week When  
 does it product  
 3SRB35XX = Marking Code  
 XX = 08, 10, 12, 16

### Package Outline

