

### FEATURES

- UL recognition file number E230084
- High-Reliability
- Heat Resistance
- Low IR
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

### MECHANICAL DATA

- **Package:** S25VB  
Molding compound meets UL 94 V-0 flammability rating, RoHS- compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

### MAXIMUM RATINGS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	S25VB10	S25VB20	S25VB40	S25VB60	S25VB80	S25VB100	S25VB120
Device marking code			S25VB10	S25VB20	S25VB40	S25VB60	S25VB80	S25VB100	S25VB120
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	100	200	400	600	800	1000	1200
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T <sub>c</sub> =85°C	I <sub>O</sub>	A	25						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	400						
Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	i <sup>2</sup> t	A <sup>2</sup> S	660						
Storage Temperature	T <sub>stg</sub>	°C	-55~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting Torque	TOR	kg cm	10						

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	S25VB10	S25VB20	S25VB40	S25VB60	S25VB80	S25VB100	S25VB120
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =12.5A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	µA	V <sub>RM</sub> =V <sub>RRM</sub>	10						

### THERMAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	S25VB10	S25VB20	S25VB40	S25VB60	S25VB80	S25VB100	S25VB120
Thermal Resistance Between junction and case, With heatsink	R <sub>θ J-C</sub>	°C/W	1.5						

### PACKAGING INFORMATION

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
S25VB10~S25VB120	A1	Approximate 20	50	50	500	Paper Box

■ **CHARACTERISTICS (TYPICAL)**

FIG1:Io-Tc Curve

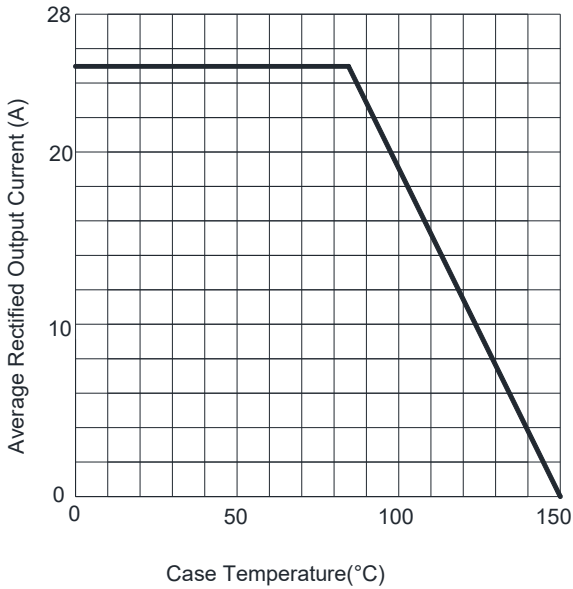


FIG2:Surge Forward Current Capability

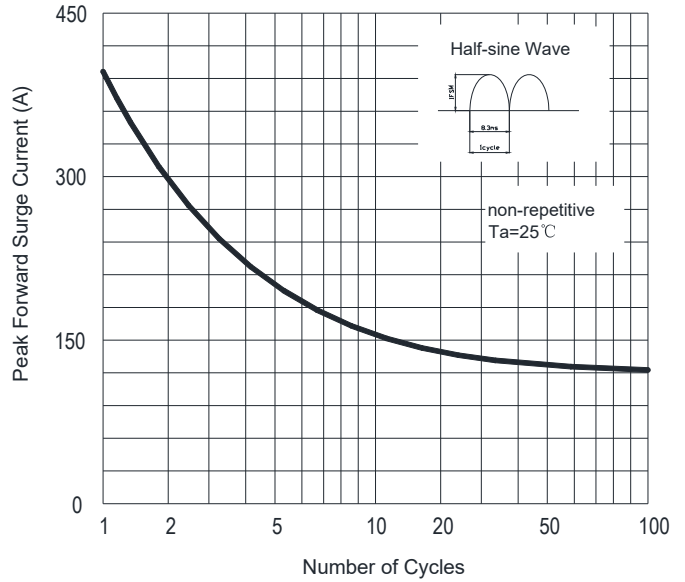


FIG3:Instantaneous Forward Voltage

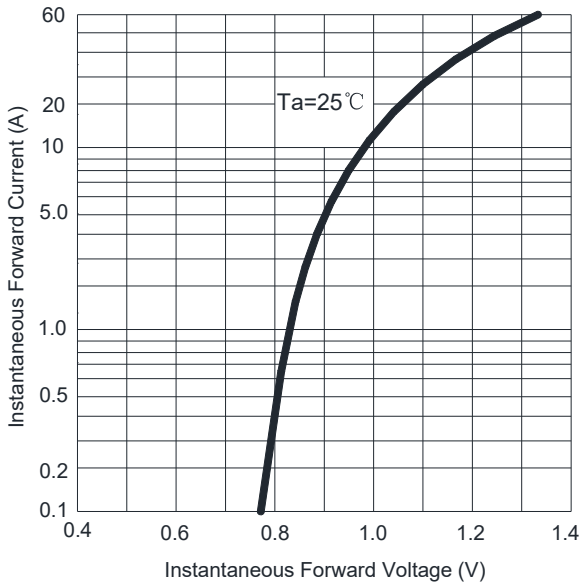
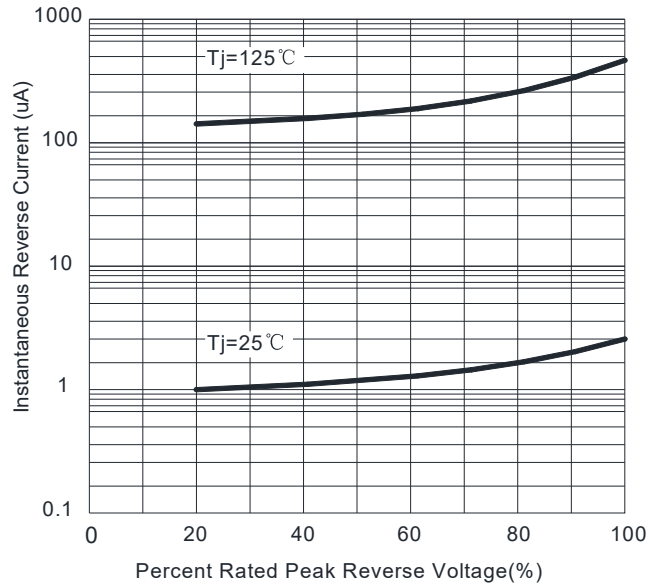
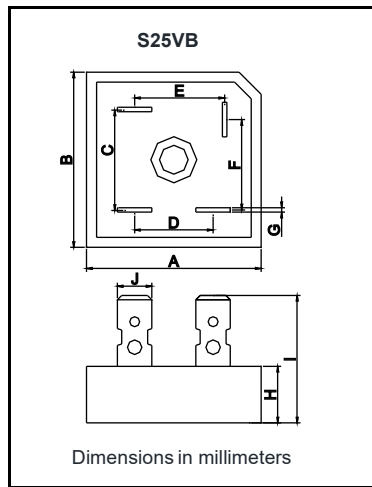


FIG4:Typical Reverse Characteristics



■ **OUTLINE DIMENSIONS**



S25VB		
Dim	Min	Max
A	31.1	32.1
B	31.1	32.1
C	17.6	18.6
D	13.7	14.7
E	15.8	16.8
F	15.8	16.8
G	0.75	0.85
H	9.5	10.5
I	/	25
J	6.2	6.4