



Surface Mount Bridge Rectifiers

Reverse Voltage 50 to 1000 Volts, Forward Current 3.0 Amperes

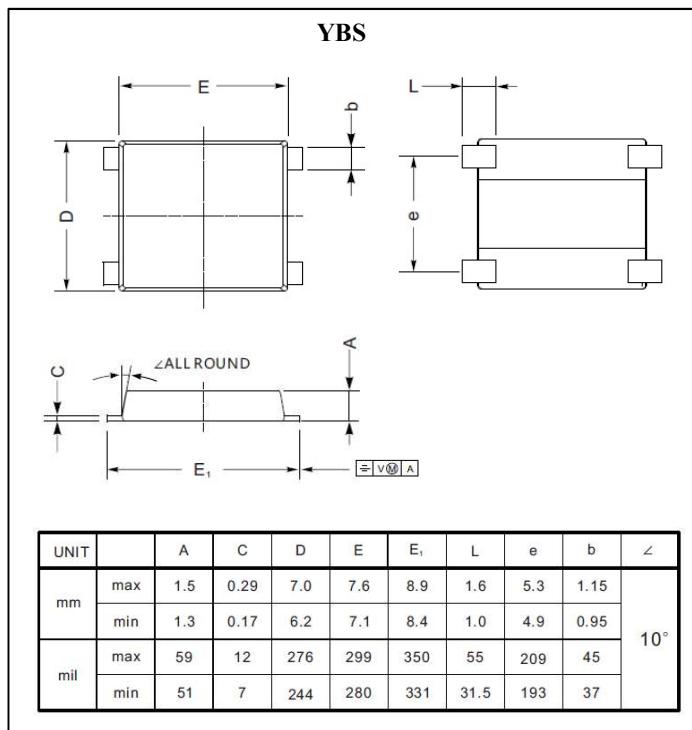
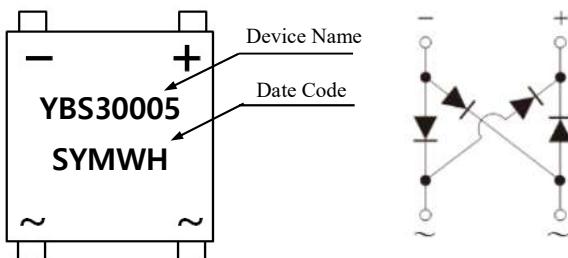
Features

- For surface mounted application
- Glass passivated junction chip
- Fast switching for high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- Case : YBS Package
- Terminals : Solderable per MIL-STD-750
- Polarity : Polarity as marked on the body
- Approx. Weight : 0.234g (approximately)

Marking



Maximum Ratings & Electrical Characteristics

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

Parameter	Symbol	YBS 30005	YBS 3001	YBS 3002	YBS 3004	YBS 3006	YBS 3008	YBS 3010	Unit	Remark
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	I _{F(AV)}								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}								A	
Maximum Instantaneous Forward Voltage at 3.0A	V _F								V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R								uA	T _a =25°C
Typical Thermal Resistance	R _{th(j-a)}								uA	T _a =125°C
Operation Junction Temperature Range	T _J								°C	
Storage Temperature Range	T _{STG}								°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Mounted on glass epoxy PC board with 4×1.5"×1.5"(3.81×3.81cm) copper pad.



Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

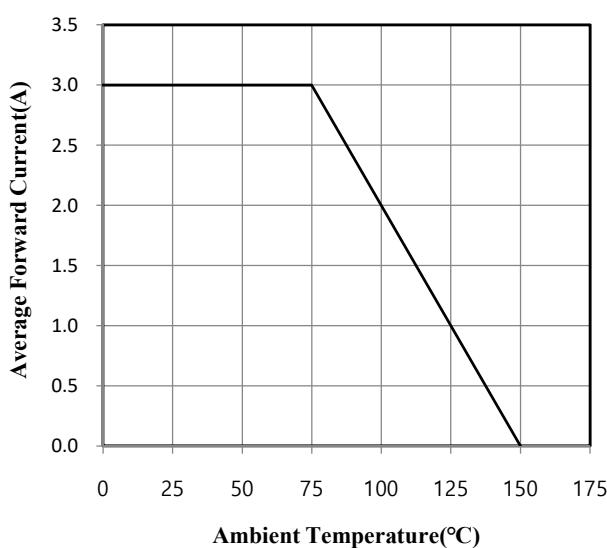


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

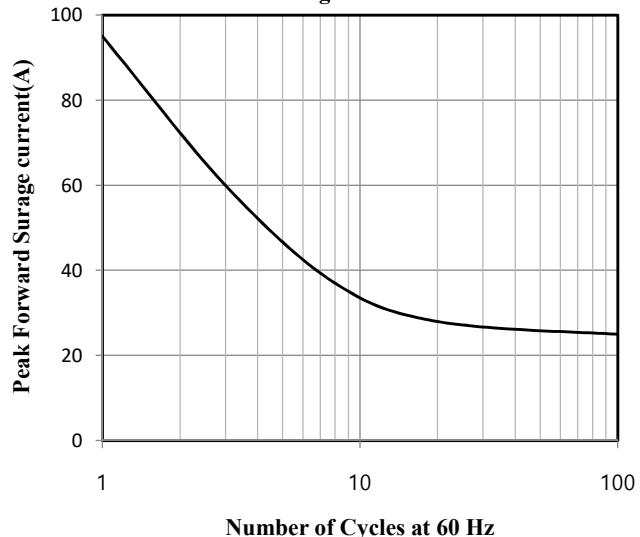


Fig.3 Typical Instantaneous Forward Characteristics

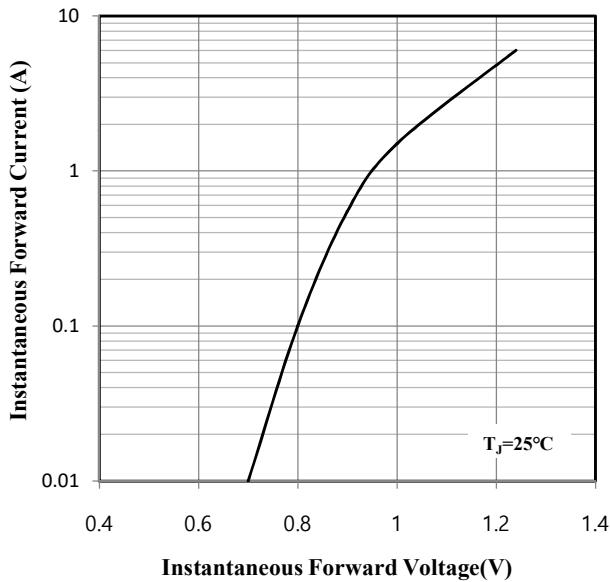


Fig.4 Typical Reverse Characteristics

