

## Surface Mount Bridge Rectifiers

### Reverse Voltage 50 to 1000 Volts, Forward Current 2.0 Amperes

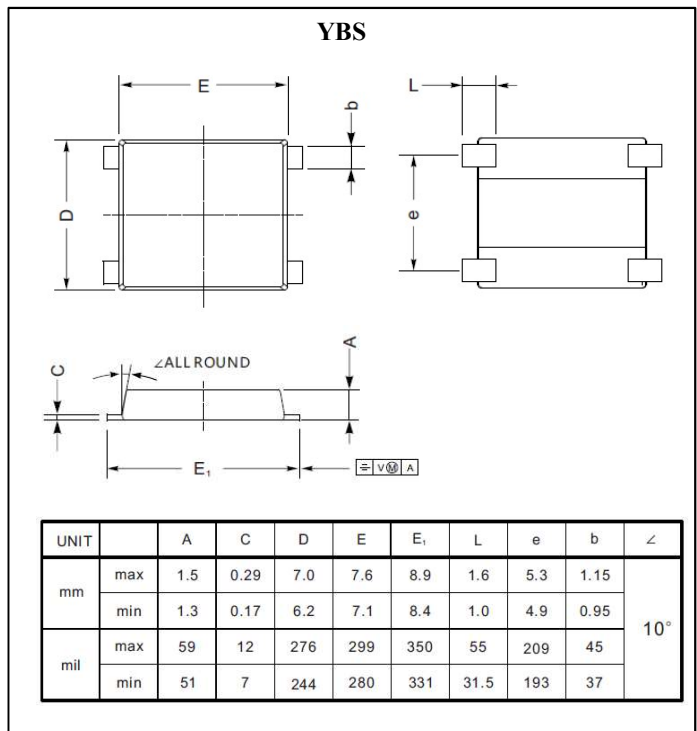
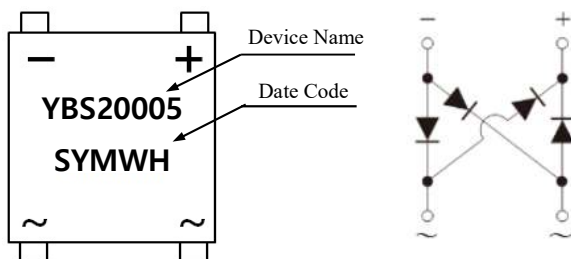
#### Features

- 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%

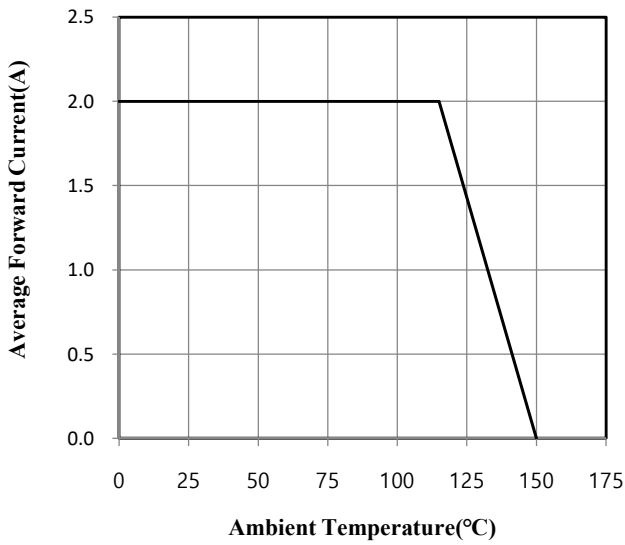
Parameter	Symbol	YBS 20005	YBS 2001	YBS 2002	YBS 2004	YBS 2006	YBS 2008	YBS 2010	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	2.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	75							A	
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	1.1							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0							uA	Ta=25°C
		100							uA	Ta=125°C
Typical Junction Capacitance	$C_J$	40							pF	Note 1
Typical Thermal Resistance	$R_{th(j-a)}$	30							°C /W	Note 2
Operation Junction Temperature Range	$T_J$	-55 to +150							°C	
Storage Temperature Range	$T_{STG}$	-55 to +150							°C	

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

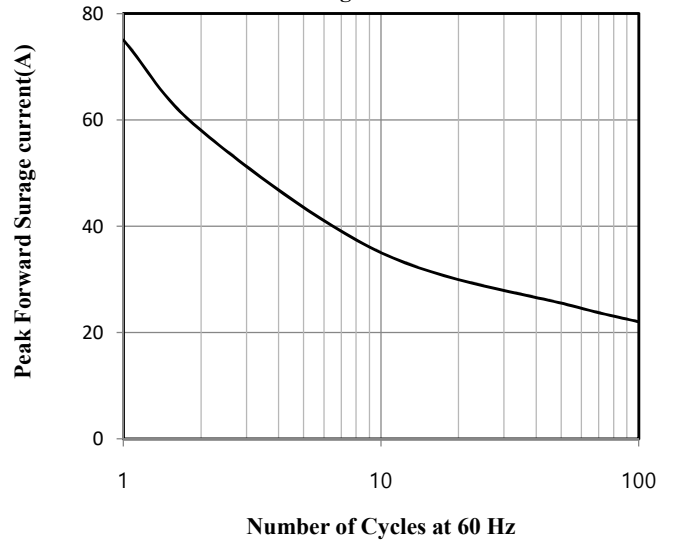
Note 2. Mounted on glass epoxy PC board with 4×1.5"×1.5"(3.81×3.81cm) copper pad.

Ratings and Characteristics Curves ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)

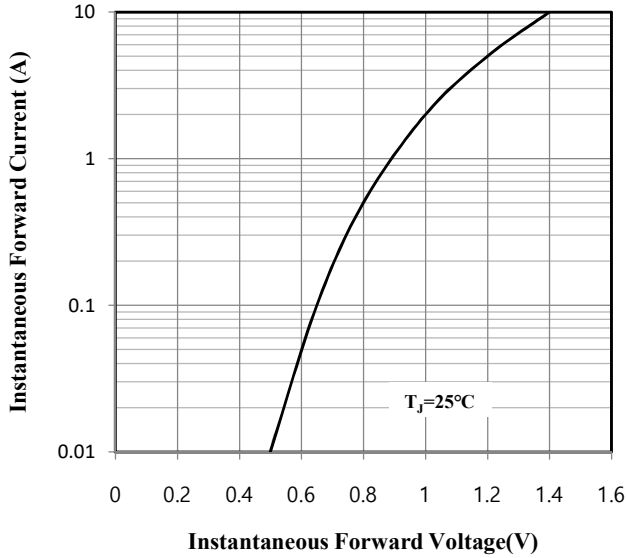
**Fig.1 Forward Current Derating Curve**



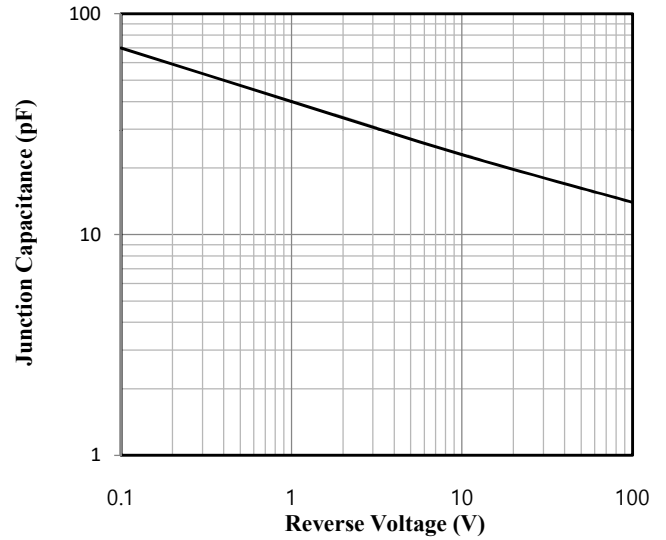
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Typical Reverse Characteristics**

