

# **Bridge Rectifiers**

#### Features

- UL recognition, file #E313149
- Glass passivated chip junction
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

#### **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

#### Mechanical Data

- Package: YBS3 Molding compound meets UL 94 V-0 flammability rating, -compliant, Halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body

#### **■Maximum Ratings** ( $T_a$ =25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	YBSM4010T
Device marking code			YBSM4010T
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1300
Maximum RMS Voltage	VRMS	V	910
Maximum DC blocking Voltage	VDC	V	1300
Average rectified output current @60Hz sine wave, R-load, Tc=100°C	IO	А	4.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C	IFSM A	_	120
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		A	240
Current squared time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode	l²t	A²s	59.8
Storage temperature	T <sub>stg</sub>	°C	-55 ~ +150
Junction temperature	Tj	°C	-55 ~ +150

#### **Electrical Characteristics** ( $T_a=25^{\circ}C$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSM4010T
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=2.0A	1.0
Maximum DC reverse current at rated DC blocking voltage IR μΑ per diode			Tj =25℃	5
		μA	Tj =125℃	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	34



#### ■Thermal Characteristics (Ta=25°C Unless otherwise specified)

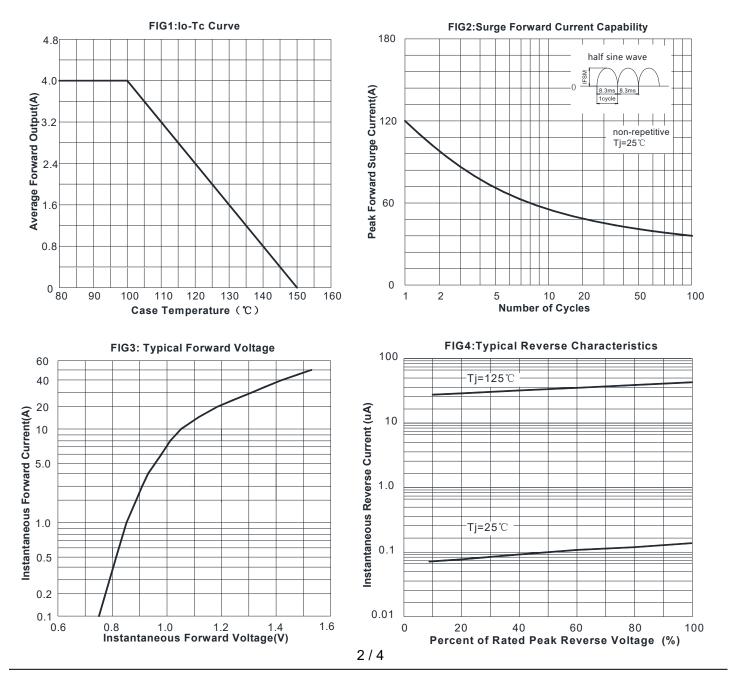
	PARAMETER	SYMBOL	UNIT	YBSM4010T
	Between Junction and Ambient	$R_{\theta J\text{-}A}$		55
Typical Thermal Resistance	Between Junction and Lead	$R_{\theta J\text{-L}}$	°C/W	15
	Between Junction and Case	$R_{\theta J\text{-}C}$		7

Note: Device mounted on P.C.B with 35mm\*25mm\*1.7mm.

#### Ordering Information (Example)

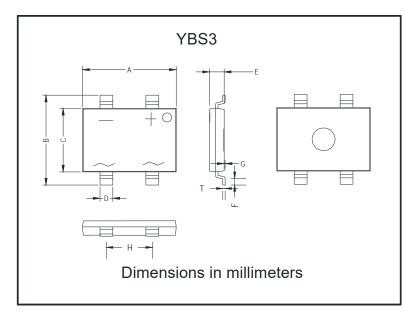
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSM4010T	F1	Approximate 0.35	1800	3600	25200	13" Reel

### Characteristics (Typical)



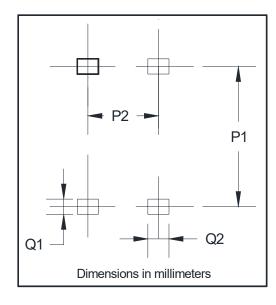


#### Outline Dimensions



YBS3				
Dim	Min	Мах		
А	10.00	10.40		
В	9.70	10.10		
С	6.80	7.20		
D	1.3	1.5		
E	1.4	1.8		
F	0.5	1.1		
G	0	0.15		
Н	4.9	5.1		
Т	0.20	0.30		

### Suggested pad layout



YBS3			
Dim Min			
9.25			
5.00			
1.00			
1.5			

Shanghai Sunco Electronics Co., Ltd



#### Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.russiansunco.com , or consult your nearest Russiansunco's sales office for further assistance.