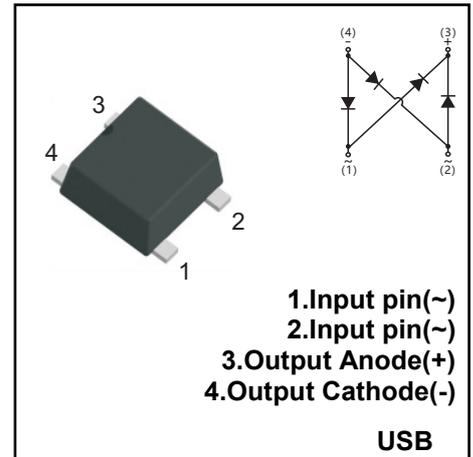


**SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER**
**Reverse Voltage - 1000V**
**Forward Current - 0.6 A**
**FEATURES**

- ◆Glass Passivated Chip Junction
- ◆High Surge Current Capability
- ◆Designed for Surface Mount Application

**MECHANICAL DATA**

- ◆Case: USB
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 45mg/0.0016oz



Marking Code	
US10B-06	YFW 6S10

**Absolute Maximum Ratings and Electrical characteristics**

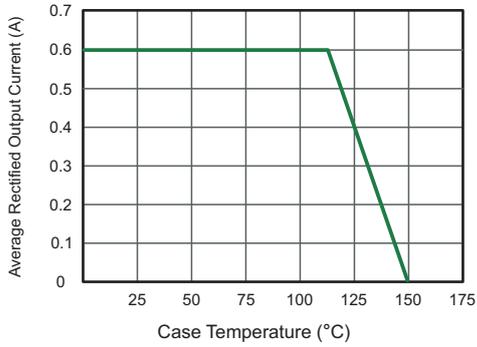
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %.

Parameter	Symbols	US10B-06	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current @ Fig.1	$I_{F(AV)}$	0.6	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load	$I_{FSM}$	16	A
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load	$I_{FSM}$	32	A
$I^2t$ Rating for fusing (3ms ≤ t ≤ 8.3ms)	$I^2t$	1.06	A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at 0.6 A	$V_F$	1.1	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	$I_R$	5 100	$\mu A$
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	3	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	55 20 30	$^\circ C/W$
Operating Junction Temperature Range	$T_j$	-55 ~ +150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^\circ C$

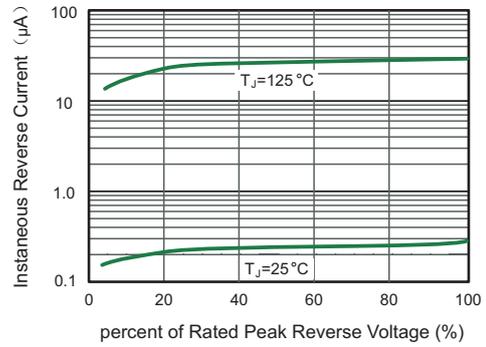
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

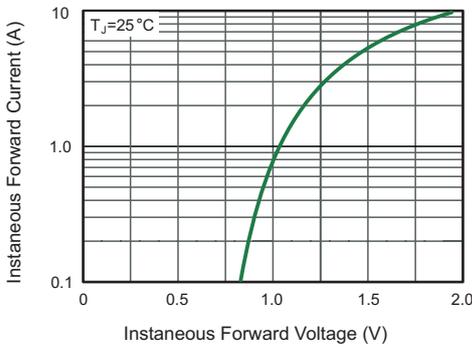
**Fig.1 Average Rectified Output Current Derating Curve**



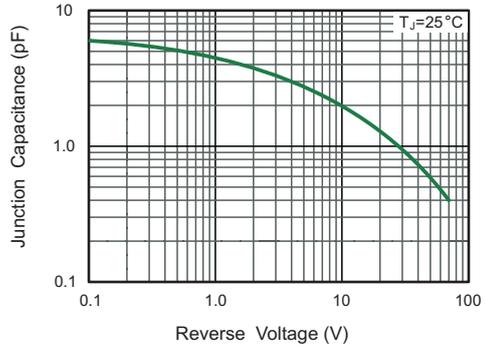
**Fig.2 Typical Reverse Characteristics**



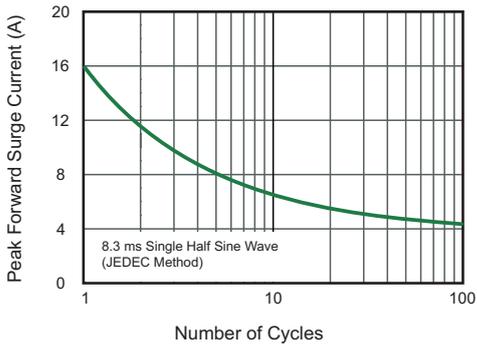
**Fig.3 Typical Instantaneous Forward Characteristics**



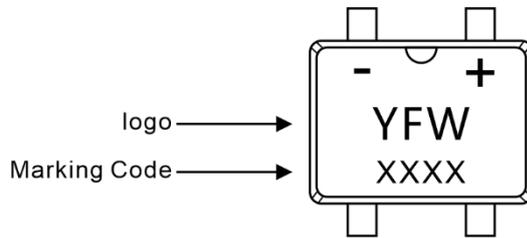
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Marking Diagram**



**Ordering information**

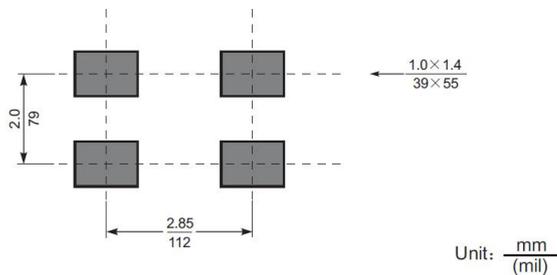
Package	Packing Description	Packing Quantity
USB	Tape/Reel, 13" reel	12000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**USB**

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	0.95	1.15	37	45
C	0.12	0.20	4.7	7.9
D	2.75	3.15	108	124
E	2.55	2.95	100	116
HE	3.35	3.75	132	148
g	0.5	0.9	20	35
d	1.8	2.2	71	87
e	0.4	0.7	16	28
∠	9°			

**The recommended mounting pad size**



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