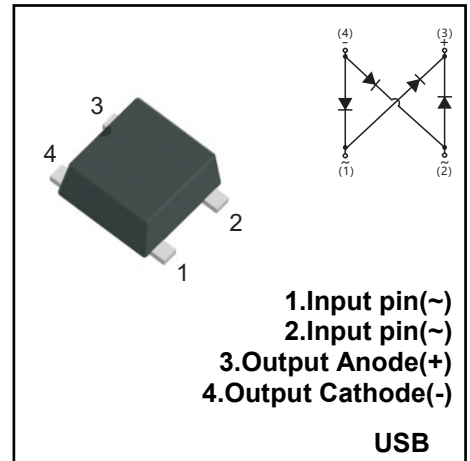


SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 1000V

Forward Current - 0.6 A



Marking Code	
US10B-06	YFW 6S10

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

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 $\leq t \leq$ 8.3ms)	I^2t	1.06	A ² S
Maximum Instantaneous Forward Voltage at 0.6 A	V_F	1.1	V
Maximum Instantaneous Reverse Current TA = 25°C at Rated DC Reverse Voltage TA = 125°C	I_R	5 100	μ A
Typical Junction Capacitance ⁽¹⁾	C_j	3	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	55 20 30	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°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

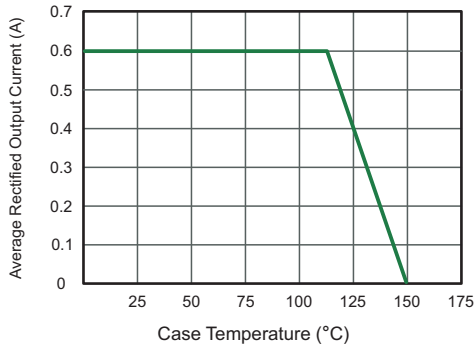


Fig.2 Typical Reverse Characteristics

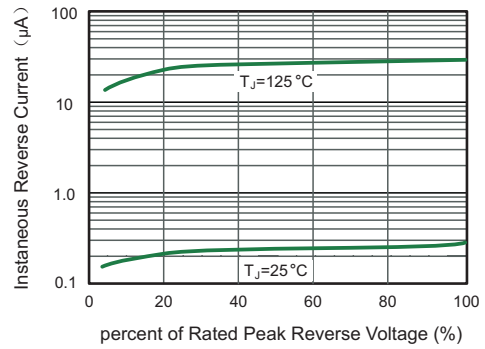


Fig.3 Typical Instantaneous Forward Characteristics

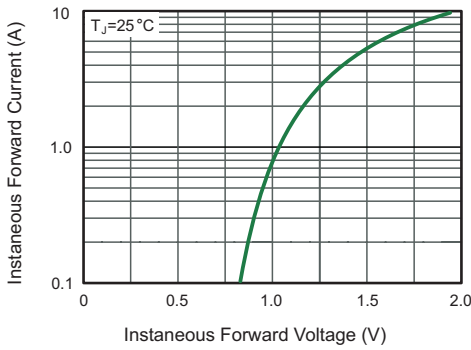


Fig.4 Typical Junction Capacitance

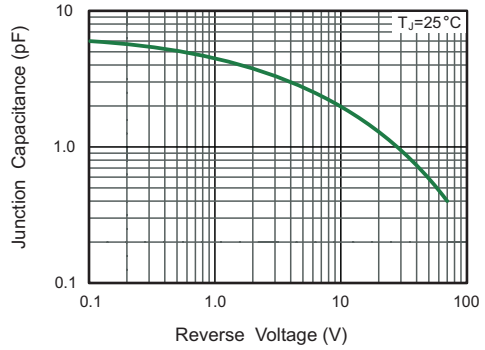
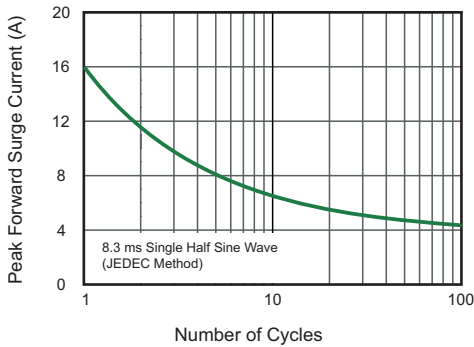
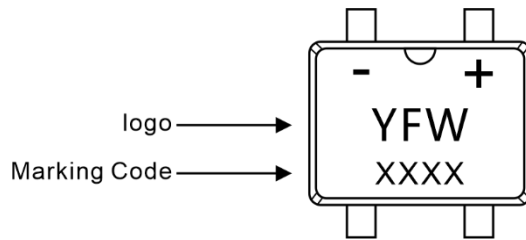


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

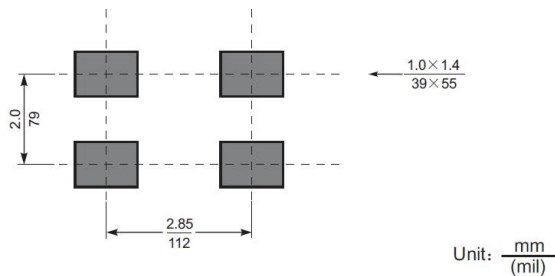
Package	Packing Description	Packing Quantity
USB	Tape/Reel, 13" reel	12000PCS/Reel 180000PCS/Carton

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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