

2.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

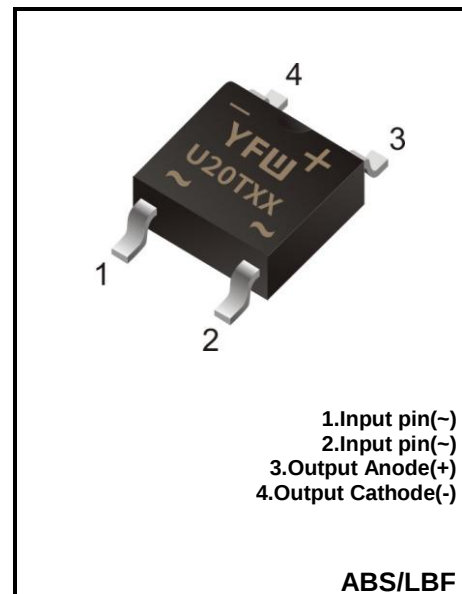
Forward Current – 2.0A

FEATURES

- ♦Fast reverse recovery time
- ♦Designed for Surface Mount Application
- ♦Glass Passivated Chip Junction
- ♦Low power loss, high efficiency
- ♦Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ♦Case: ABS/LBF
- ♦Terminals: Solderable per MIL-STD-750, Method 2026
- ♦Approx. Weight: 88mg / 0.0031oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

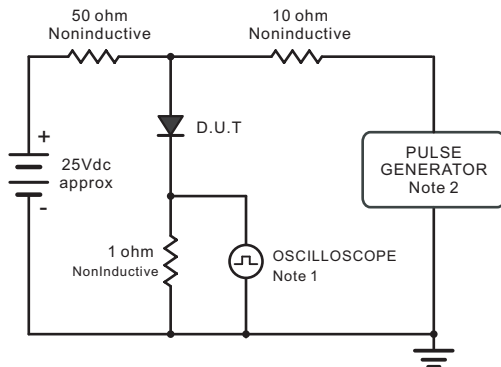
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	U20T01	U20T02	U20T04	U20T06	U20T08	U20T10	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at T _c = 125 °C	I _o	2.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I _{FSM}	60						A
Forward Voltage per element at 2.0A	V _F	1.0		1.3		1.5		V
Maximum DC Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =125°C	I _R	5.0 100						μA
Typical Junction Capacitance ^(Note1)	C _j	30						pF
Maximum Reverse Recovery Time ^(Note2)	T _{RR}	50			75			nS
Typical Thermal Resistance ^(Note3)	R _{θJA} R _{θJC}	65 16						°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150						°C

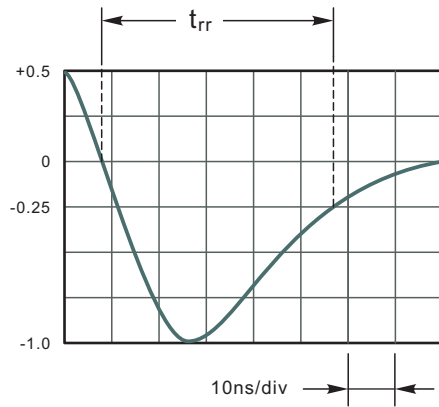
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm, 22pF.
2. Rises Time = 10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

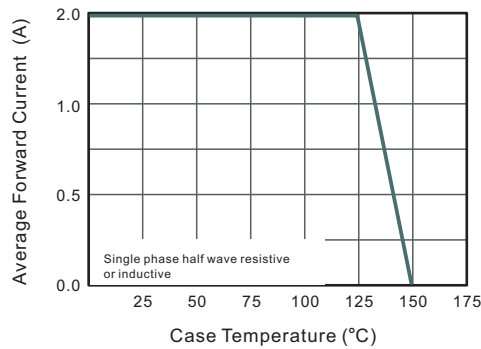


Fig.3 Typical Reverse Characteristics

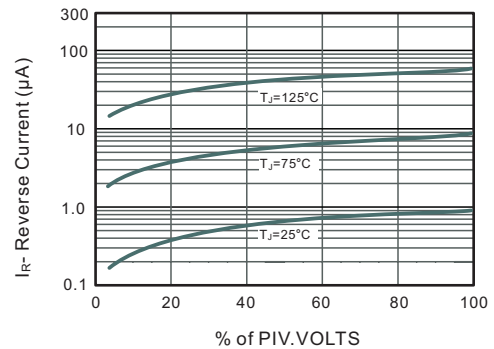


Fig.3 Typical Instantaneous Forward Characteristics

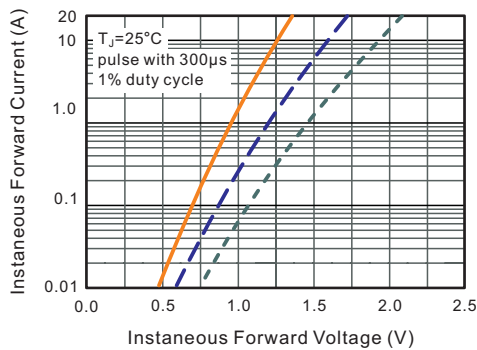
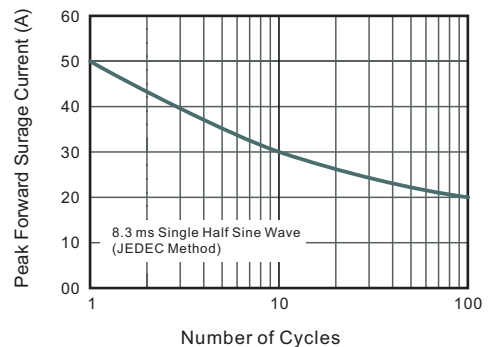
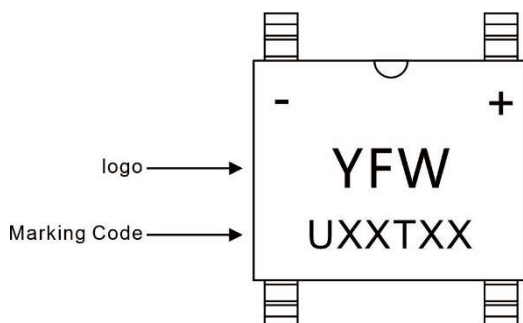


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram

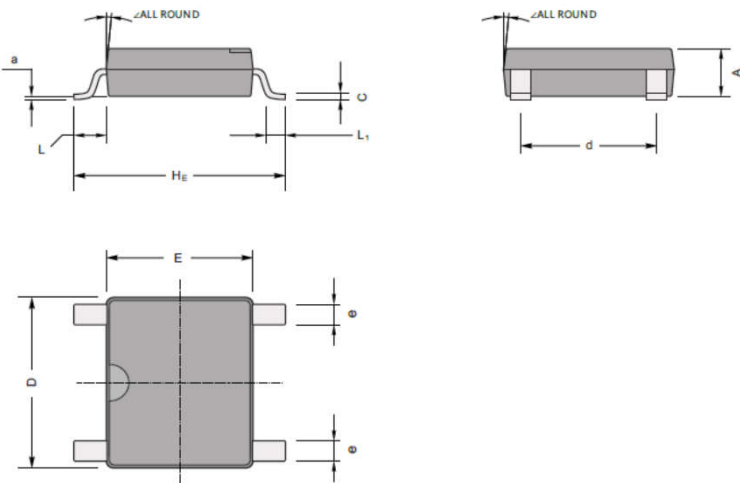


Ordering information

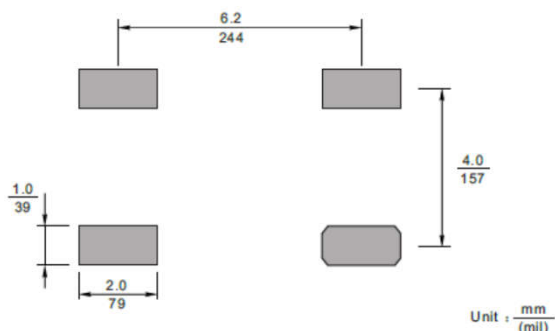
Package	Packing Description	Packing Quantity
ABS(LBF)	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

ABS(LBF)

	<table><tr><th rowspan="2">Dim.</th><th colspan="2">Millimeter(mm)</th><th colspan="2">(mil)</th></tr><tr><th>Min.</th><th>Max.</th><th>Min.</th><th>Max.</th></tr><tr><td>A</td><td>1.3</td><td>1.5</td><td>51</td><td>59</td></tr><tr><td>C</td><td>0.15</td><td>0.22</td><td>5.9</td><td>8.7</td></tr><tr><td>D</td><td>4.9</td><td>5.2</td><td>193</td><td>205</td></tr><tr><td>E</td><td>4.2</td><td>4.5</td><td>166</td><td>177</td></tr><tr><td>HE</td><td>6.0</td><td>6.4</td><td>236</td><td>252</td></tr><tr><td>d</td><td>3.8</td><td>4.2</td><td>150</td><td>165</td></tr><tr><td>e</td><td>0.5</td><td>0.7</td><td>20</td><td>28</td></tr><tr><td>L</td><td colspan="2">0.95</td><td colspan="2">37</td></tr><tr><td>L1</td><td colspan="2">0.6</td><td colspan="2">24</td></tr><tr><td>a</td><td colspan="2">0.2</td><td colspan="2">8</td></tr><tr><td>∠</td><td colspan="4">7°</td></tr></table>	Dim.	Millimeter(mm)		(mil)		Min.	Max.	Min.	Max.	A	1.3	1.5	51	59	C	0.15	0.22	5.9	8.7	D	4.9	5.2	193	205	E	4.2	4.5	166	177	HE	6.0	6.4	236	252	d	3.8	4.2	150	165	e	0.5	0.7	20	28	L	0.95		37		L1	0.6		24		a	0.2		8		∠	7°			
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The recommended mounting pad size



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