

Ultrasoft Recovery Bridge



ABS-F Package

PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 2 A
- Ultrasoft Recovery
- Designed For Surface Mount Application

Benefits

- Case: ABS-F
- Terminals: Solderable Per MIL-STD-750
- Approx. Weight: 82mg 0.0029oz

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 %.

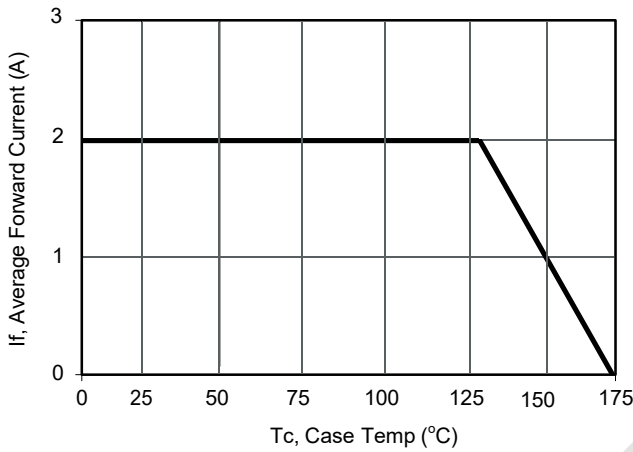
Parameter	Symbols	WRABS20JF	WRABS20KF	WRABS20MF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	600	800	1000	V
Maximum RMS voltage	VRMS	420	560	700	V
Maximum DC Blocking Voltage	VDC	600	800	1000	V
Average Rectified Output Current	I_o	2			A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	T_{rr}	10			us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	55			A
$I^2 t$ rating for fusing (1ms < t < 10ms)	$I^2 t$	15			A ² S
Maximum Forward Voltage at 1 A	V_F	1.1			V
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	I_R	5 100			μA
Typical Junction Capacitance (Note1)	C_j	40			pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +175			$^\circ\text{C}$
Typical thermal resistance (Note 2)	R_{thJC} R_{thJA}	16 45			$^\circ\text{C/W}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

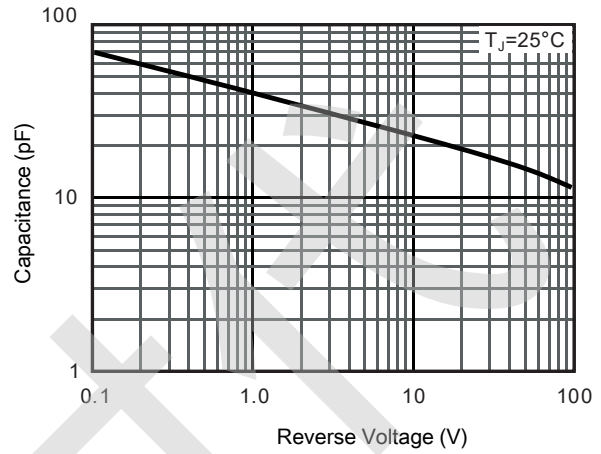
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

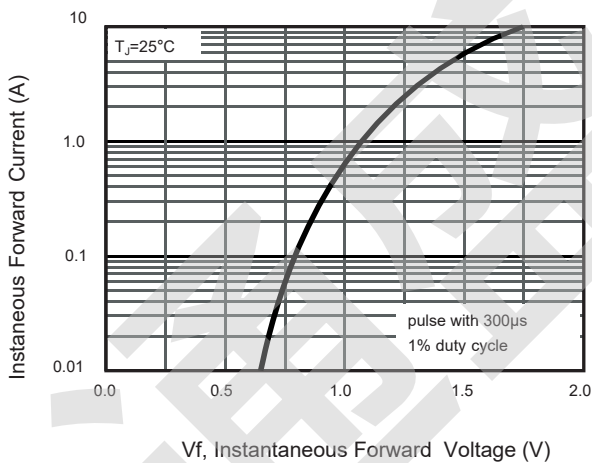
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



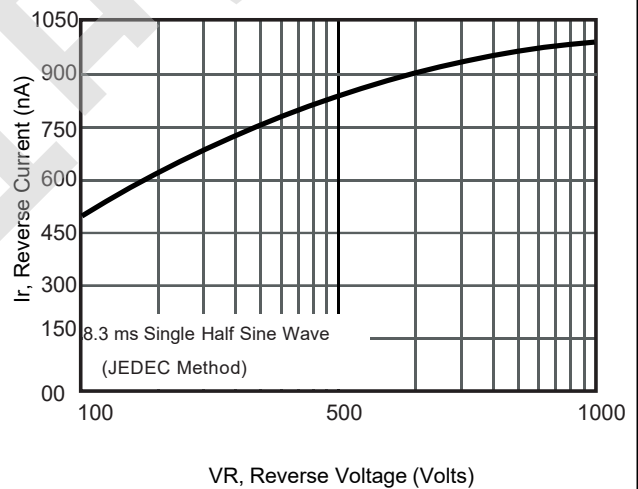
Current Derating, Case



Typical Junction Capacitance

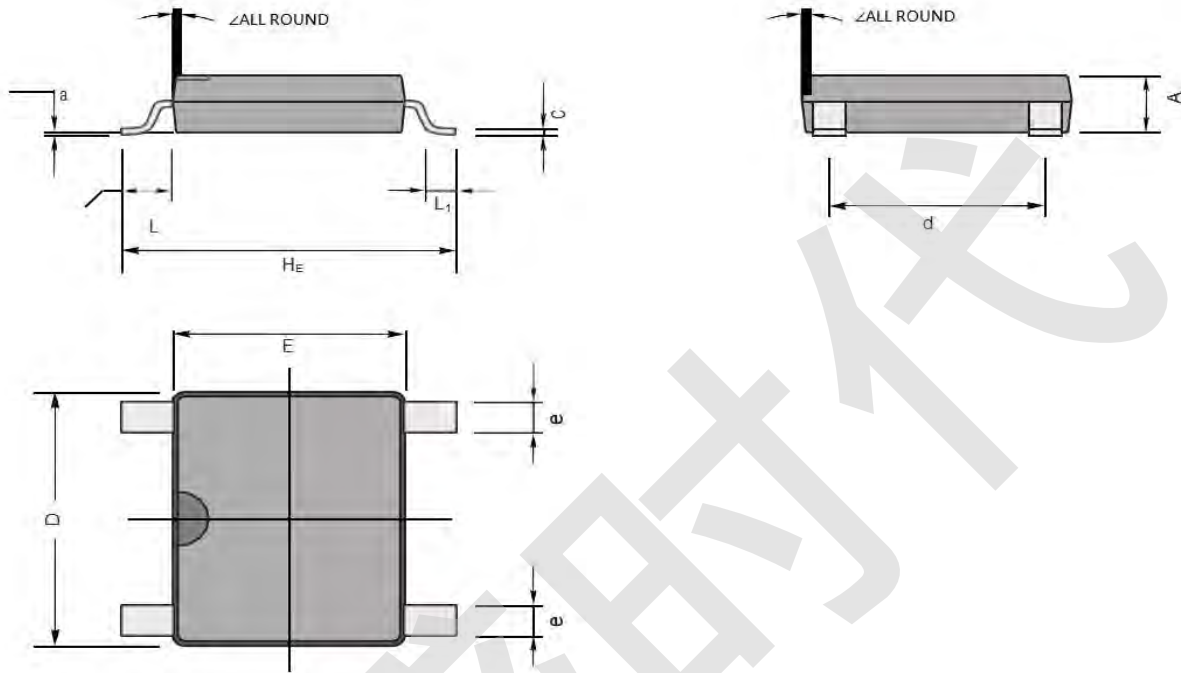


Typical Forward Voltage



Typical Reverse Current

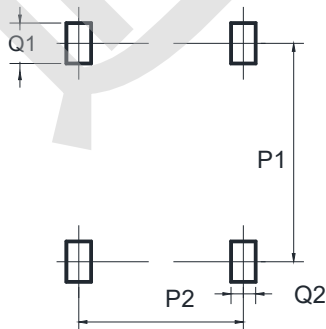
PACKAGE OUTLINE DIMENSIONS



ABS-F mechanical data

UNIT		A	C	D	E	HE	d	e	L	L ₁	a	∠
mm	max	1.3	0.25	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.0	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	51.19	9.85	205	177	252	165	27.55	37.40	23.62	7.87	
	min	39.37	5.91	193	166	236	149	19.68				

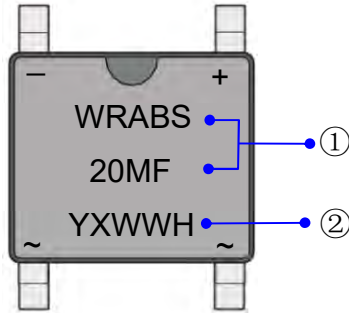
ABS-F Suggested Pad Layout



Dimensions is millimeters

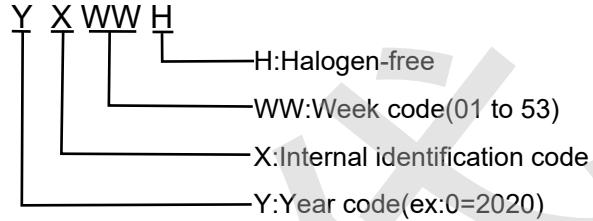
UNIT		P1	P2	Q1	Q2
mm	min	5.70	4.00	1.0	0.9
mil	min	224.40	157.48	39.37	35.43

Marking Information



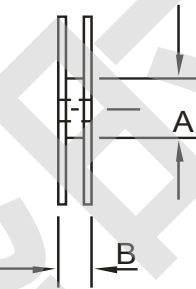
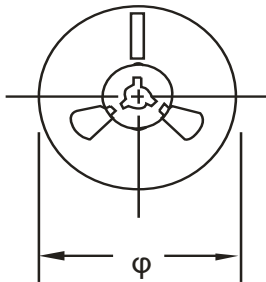
① Product model : WRABS20MF (or WRABS20JF ;or WRABS20KF)

② PDC information :

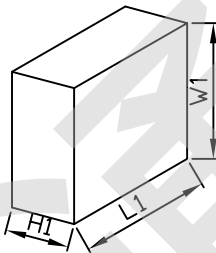


Packaging Information

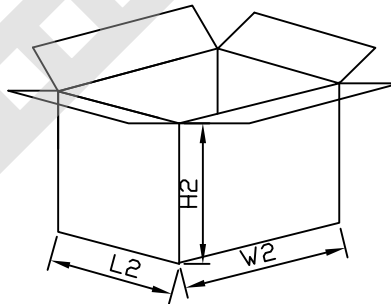
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		φ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	330	100	15	335	335	43	360	360	270
QTY	PCS	Smallest package,5000PCS/reel			10,000PCS,2 reel in total			60,000PCS/carton,6boxes in total		
Note		Tolerance ≤20mm,±3mm;			21-100mm,±5mm;			101-500mm,±10mm		