



# ABS20JG THRU ABS20MG

## Ultrasoft Recovery Bridge



ABS Package

### PINNING

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

### 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	ABS20JG	ABS20KG	ABS20MG	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	V
Average Rectified Output Current	$I_O$	2.0			A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	$T_{rr}$	15			us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	70			A
$I^2 t$ rating for fusing ( 1ms < t < 10ms)	$I^2 t$	24.5			A <sup>2</sup> S
Maximum Forward Voltage at 1.0 A	$V_F$	1.0			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			$\mu\text{A}$
Typical Junction Capacitance ( Note1 )	$C_j$	40			pF
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175			$^\circ\text{C}$

Note: 1. Measured at 1MHz 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.

### Features

- Ultrasoft recovery
- low  $I_{RRM}$
- low VF
- High  $V_{RRM}$
- Special frame design for heat dissipation

### Benefits

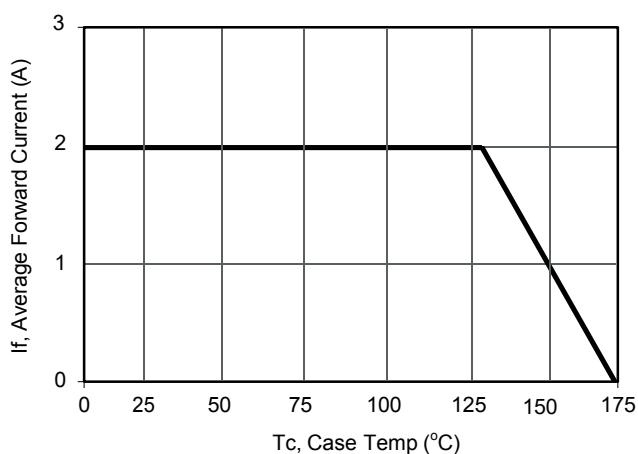
- Reduced EMI
- Reduced power loss and switching transistor
- Reduced snubbing



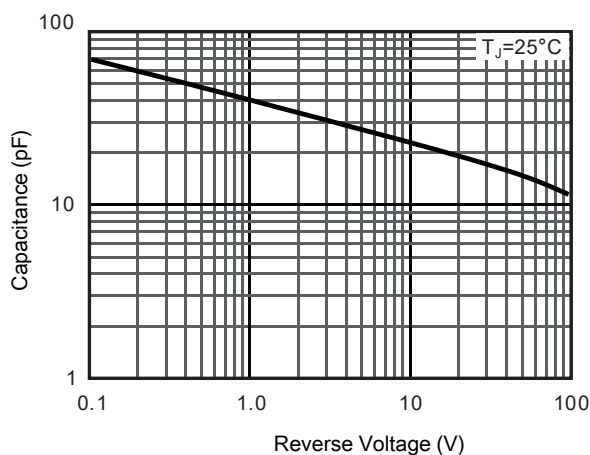
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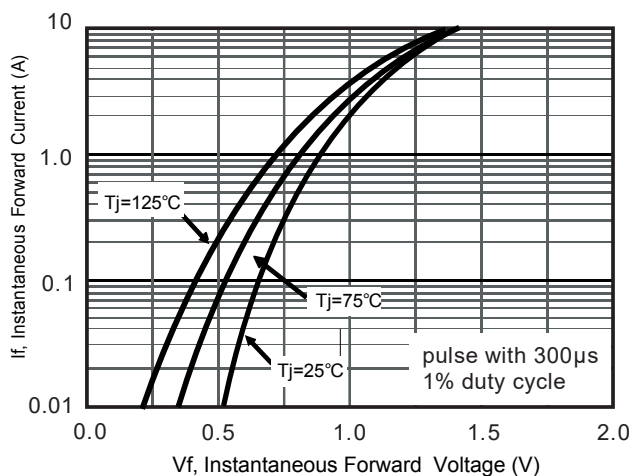
### Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)



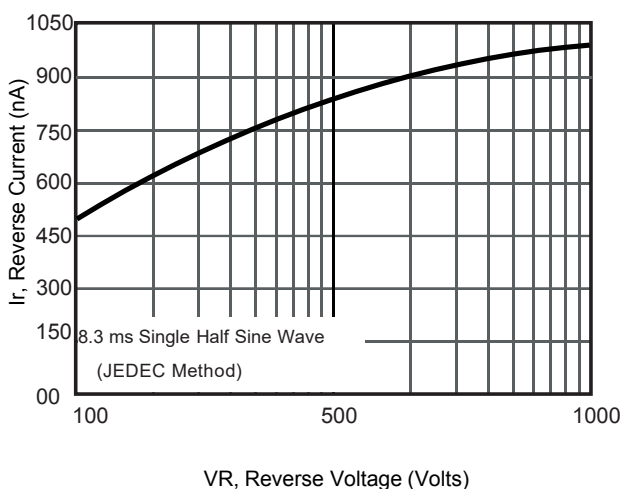
Current Derating, Case



Typical Junction Capacitance



Typical Forward Voltage



Typical Reverse Current





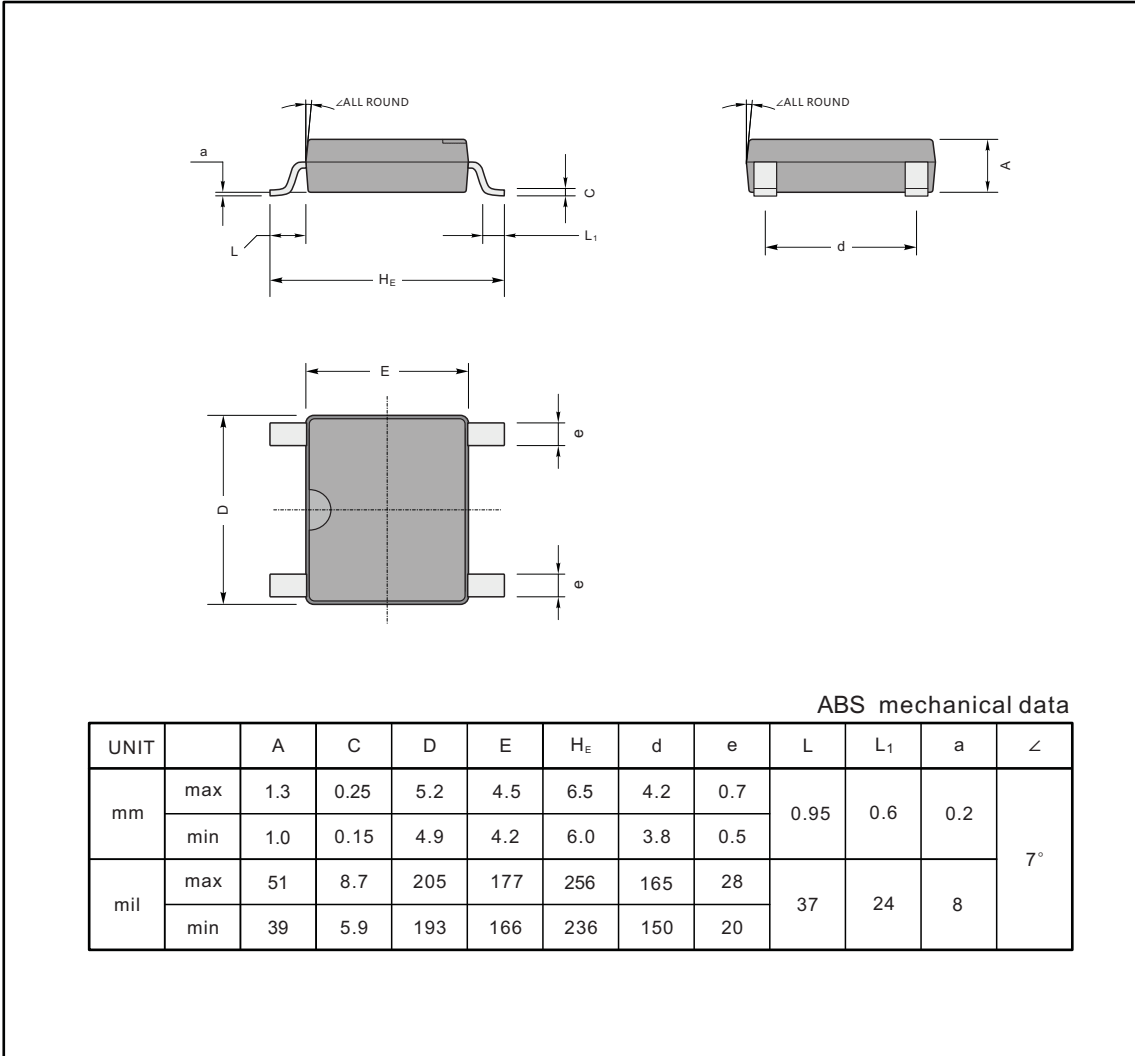
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### PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS



### The recommended mounting pad size

