

BRIDGE RECTIFIER



ABS 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
- High Surge Current Capability
- Designed For Surface Mount Application

Benefits

- Case: ABS
- 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	ABS20MG	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Average Rectified Output Current	I _o	2	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	70	A
I ² t rating for fusing (1ms< t < 10ms)	I ² t	24.5	A ² S
Maximum Forward Voltage at 1 A	V _F	1.0	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I _R	5 100	μA
Typical Junction Capacitance (Note1)	C _j	25	pF
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +175	°C
Typical thermal resistance (Note 2)	R _{thJC} R _{thJA}	16 60	°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)

Fig.1 Typical Reverse Characteristics

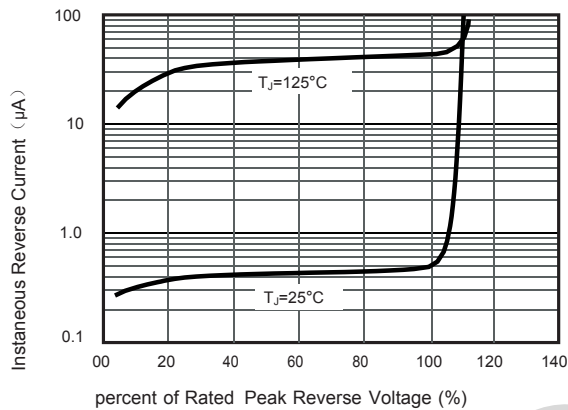


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

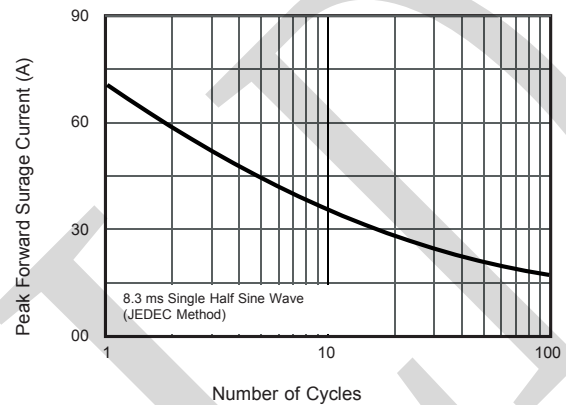


Fig.3 Typical Instantaneous Forward Characteristics

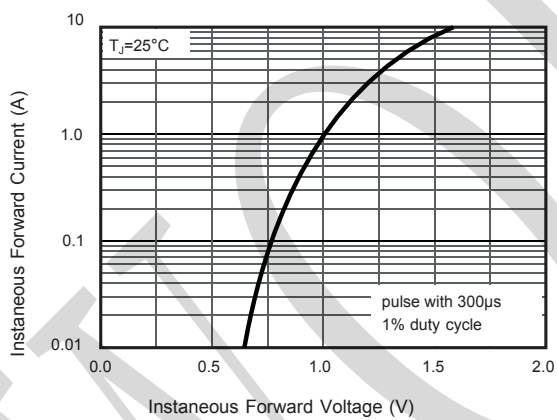
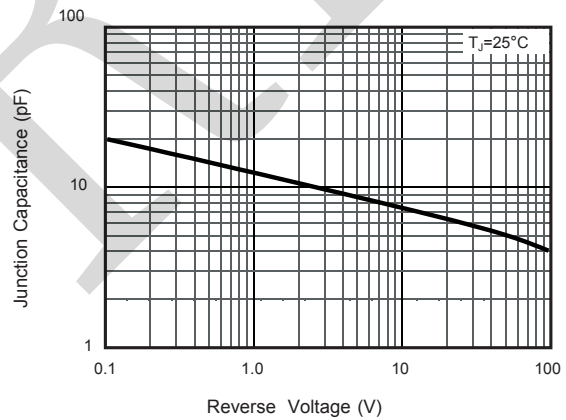
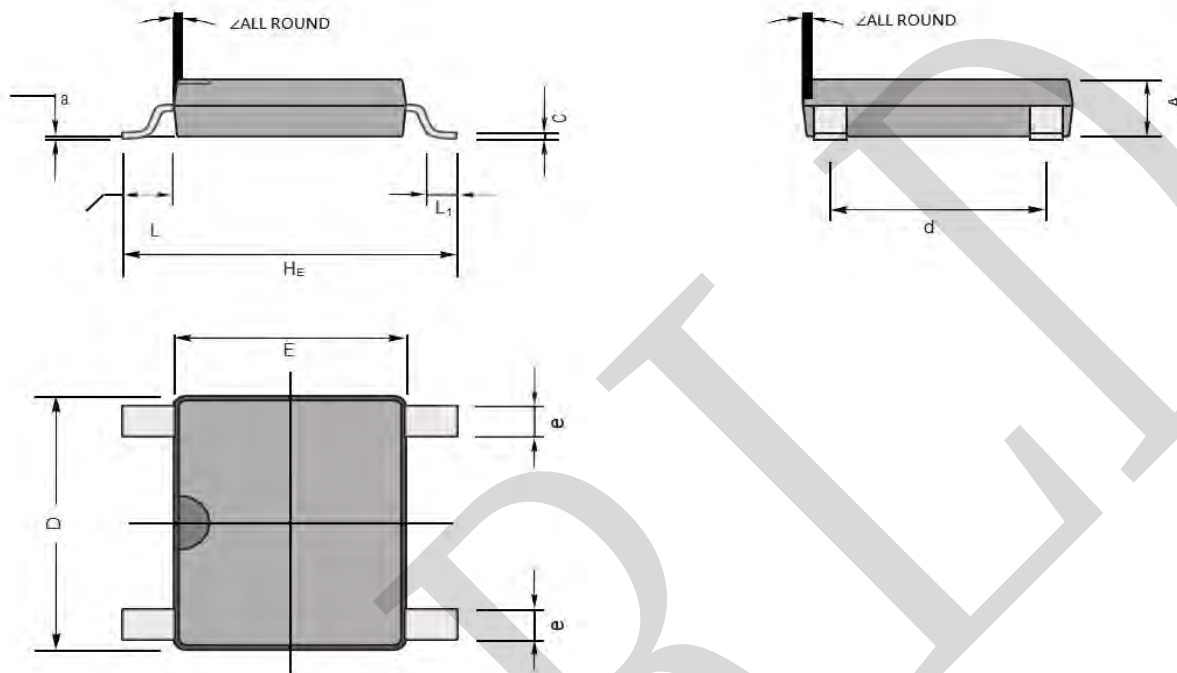


Fig.4 Typical Junction Capacitance



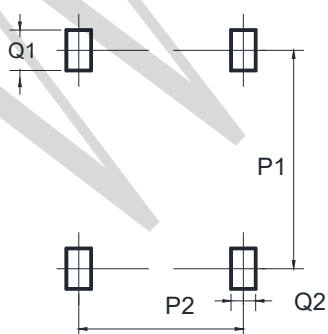
PACKAGE OUTLINE DIMENSIONS



ABS mechanical data

UNIT		A	C	D	E	HE	d	e	L	L ₁	a	∠
mm	max	1.5	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.2	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	59.1	8.66	205	177	252	165	27.55	37.40	23.62	7.87	
	min	47.23	5.91	193	166	236	149	19.68				

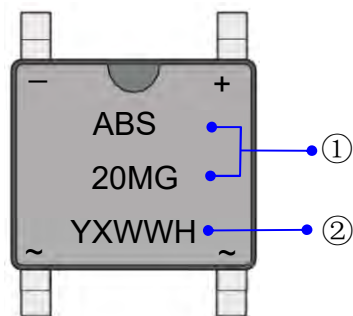
ABS Suggested Pad Layout



Dimensions is millimeters

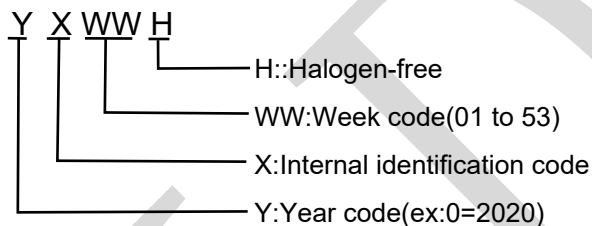
UNIT		P1	P2	Q1	Q2
mm	min	5.70	4.00	1.0	0.9
mil	min	224.40	157.48	39.37	35.43

Marking Information



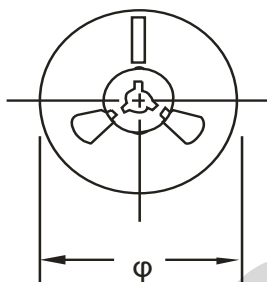
①Product model : ABS20MG

②PDC information:

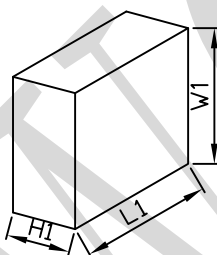


Packaging Information

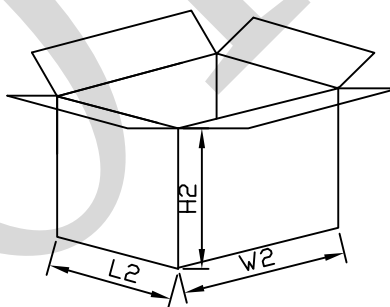
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		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									