ABS206E50

23-MAR-2021

Special For DC-AC Rectifier Bridge

ABS Package

PINNING

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

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance: 260℃/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

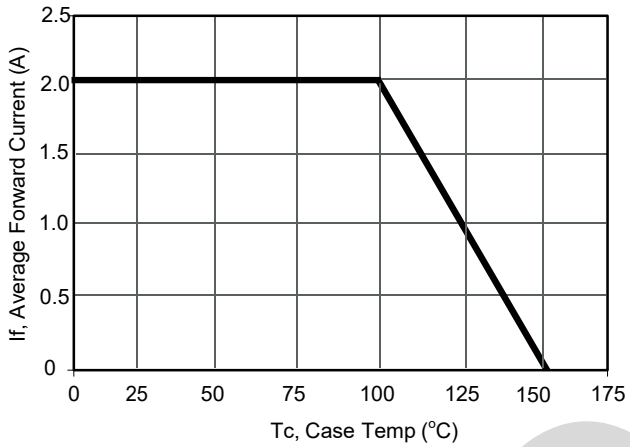
Ratings at 25 °C ambient temperature unless otherwise specified.Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	ABS206E50	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Average Rectified Output Current	I_O	2	A
Reverse Recovery Time.IF=0.5A,IR=1A,IRR=0.25A	Trr	50	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	50	A
I^2t rating for fusing (1ms< t < 8.3ms)	I^2t	10.3	A^2S
Dielectric Strength：Terminals to Case, AC 1 minute	Vdis	2.5	KV
Mounting torque	TOR	Recommended torque:0.5	N.m
Maximum Forward Voltage at 1.0 A	V_F	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 500	μA
Junction to ambient , without heatsink @T_A=25 °C Junction to case, with heatsink @T_A=125 °C	$R_{\theta JA}$ $R_{\theta JC}$	60 16	℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

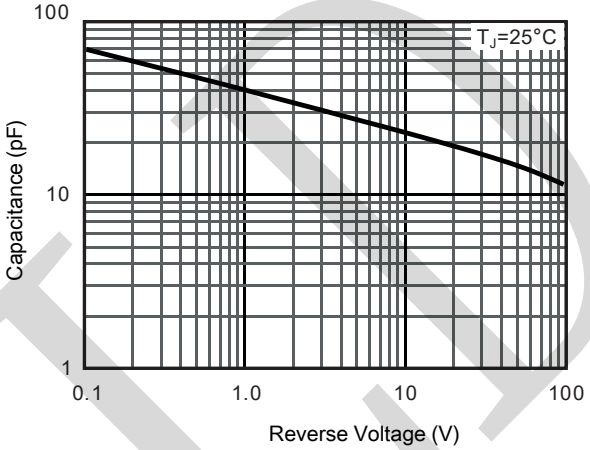
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

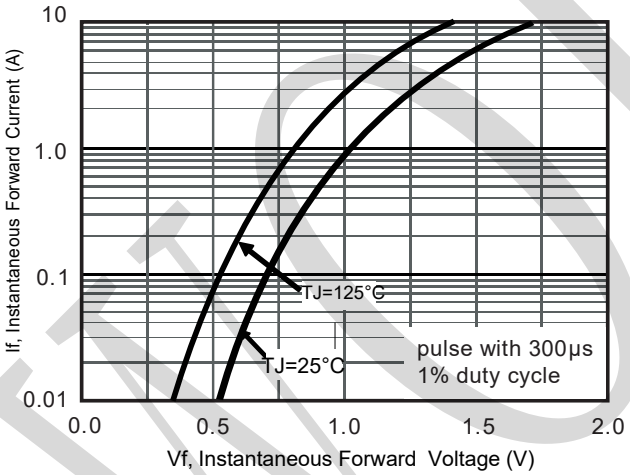
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



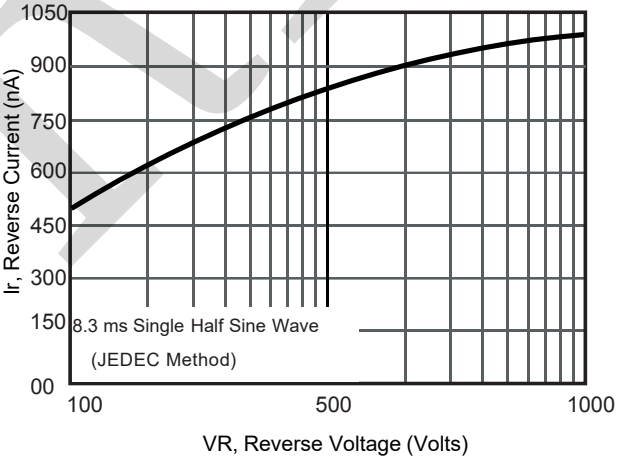
Current Derating, Case



Typical Junction Capacitance

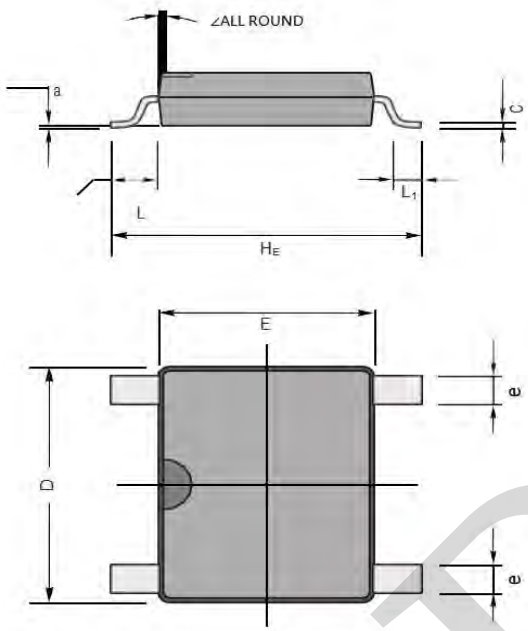


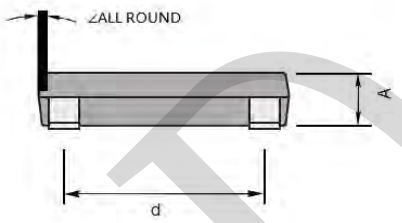
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

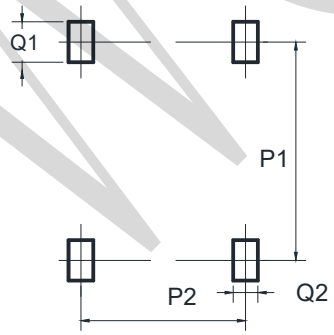




ABS mechanical data

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				

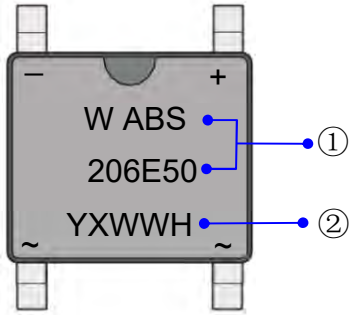
ABS Suggested Pad Layout



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 : ABS206E50

②PDC information：

Y X WW H

H:Halogen-free

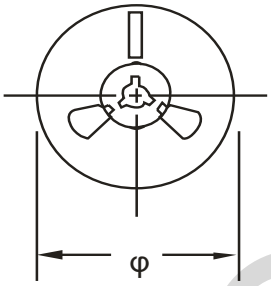
WW:Week code(01 to 53)

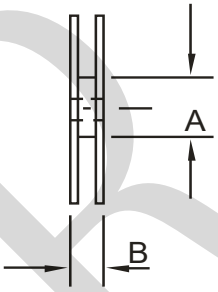
X:Internal identification code

Y:Year code(ex:0=2020)

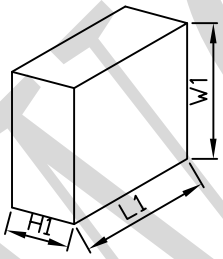
Packaging Information

1.Reel Dimensions

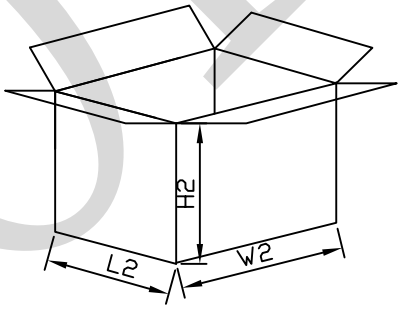




2.Inside Box



3.Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	∮	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									