ABS216

HIGH FORWARD SURGE SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage: 1600 Volts
Forward Current: 2.0 Amps

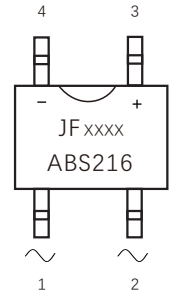
SEMICONDUCTOR

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Very high forward surge current capability
- Low forward voltage drop,High current capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

HALOGEN FREE

ABS

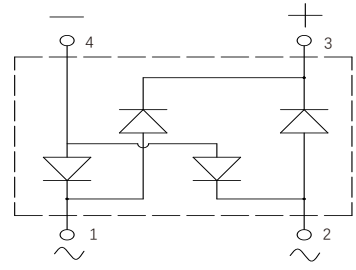


Marking:

JF:Logo
xxxx:Date code
ABS216:Type
+-:Polarity

MECHANICAL DATA

- Case: ABS molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750,method 2026
- Mounting Position: Any



TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.

MAXIMUM RATINGS

(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3ms single hanf Sine-wave	I_{FSM}	55	A
Rating for fusing (t=8.3ms)	I^2t	12.56	A^2s
Operating junction temperature range	T_J	-55 to+150	℃
Storage temperature range	Tstg	-55 to+150	℃

ELECTRICAL CHARACTERISTICS (T_J=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max	Unit
Breakdown voltage Blocking voltage	I_R=100μA		V_{BR} V_R	1600	-	-	V
Instaneous forward voltage	T_J=25℃	I_F=0.5A	V_F 1)	-	0.85	-	V
		I_F=1.0A		-	0.89	-	
		I_F=2.0A		-	0.95	1.05	
	T_J=125℃	I_F=0.5A		-	0.73	-	
		I_F=1.0A		-	0.78	-	
		I_F=2.0A		-	0.86	-	
Reverse current	T_J=25℃	V_R=1600V	I_R 2)	-	-	5	μA
	T_J=100℃			-	-	25	μA
	T_J=125℃			-	-	100	
Junction capacitance	4V,1MHz		C_J	-	16	-	pF

Notes: 1.Pulse test: 300μs pulse width,1% duty cycle

2.Pulse test: pulse width≤40ms

THERMAL CHARACTERISTCS

Parameter	Symbol	ABS	Unit
Typical thermal resistance 3)	RθJA RθJC	62 25	℃/W

Notes3: Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.56"*0.73" copper pad.

AVAILABALE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Quantity (reel/box)	Quantity (box/carton)	Quantity (K/carton)
ABS216-ABS	T/R	Φ330	3000	2	8	48

FIG.1-FORWARD CURRENT DERATING CURVE

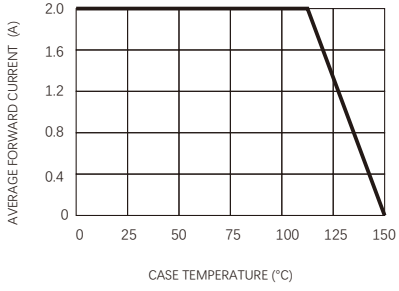


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

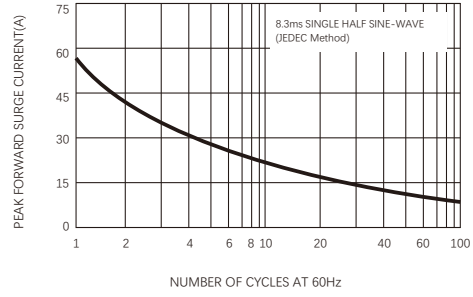


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

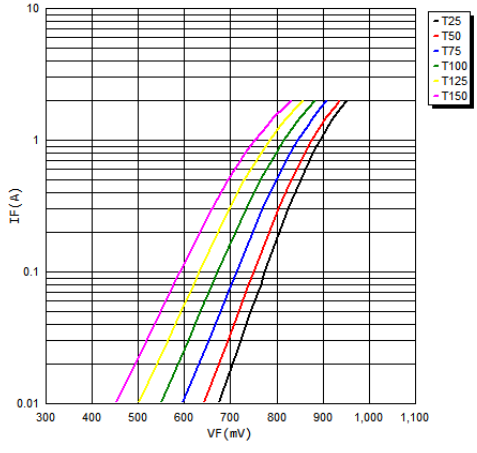


FIG.4-TYPICAL REVERSE CHARACTERISTICS

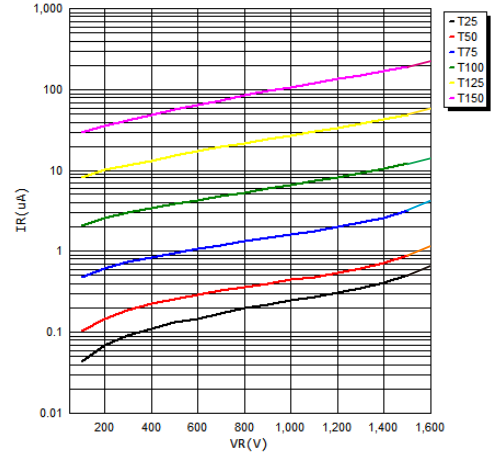
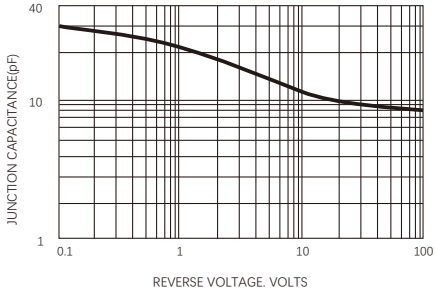
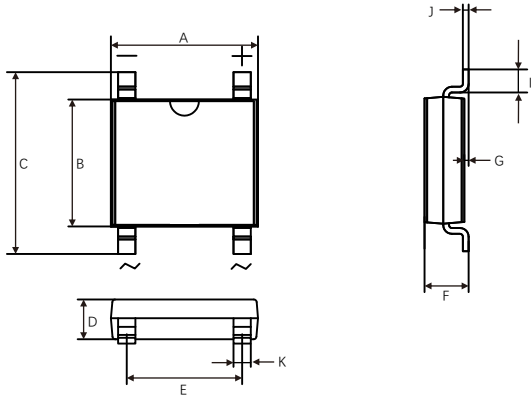


FIG.5-TYPICAL JUNCTION CAPACITANCE



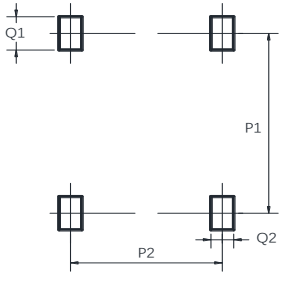
PACKAGE OUTLINE DIMENSIONS

ABS



UNIT:mm		
DIM	MIN	MAX
A	4.80	5. 40
B	4.20	4. 60
C	6.00	6. 80
D	1.20	1. 50
E	3.80	4. 40
F	1.22	1.60
G	0.05	0.15
I	0.30	0. 80
J	0.10	0. 30
K	0.50	0. 85

Suggested solder pad layout



Dim	Min
P1	5.72
P2	4.00
Q1	1.00
Q2	0.90

Dimensions in millimeters

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