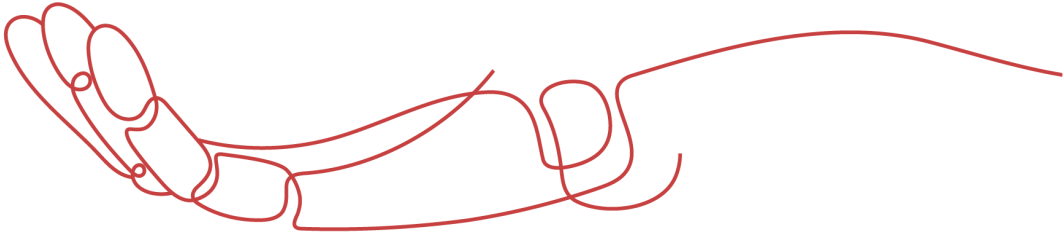




PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at



Datasheet



Resources

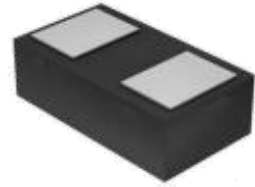


Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

FEATURES

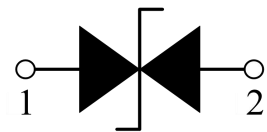
- Low Forward Voltage Drop
- Extremely Small DFN1006 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Band Indicates Cathode
- Tape and reel: 10,000Pcs/ 7" reel



DFN1006

APPLICATIONS

- Low voltage rectification
- Reverse polarity protection
- Low power consumption applications



MAXIMUM RATING (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
VRRM	Maximum repetitive reverse voltage	40	V
VR	Maximum DC blocking reverse voltage	40	V
IF(AV)	Average Forward Current	500	mA
IFSM	Peak Forward Surge Current (At 8.3ms single half sine-wave)	5	A
TJ	Operating Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature Range	-55 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at IR=100uA	VBR	40			V
Reverse Leakage Current at VR=20V	IR			50	μA
Reverse Leakage Current at VR=40V	IR			80	μA
Forward Voltage at IF=100mA	VF			0.37	V
Forward Voltage at IF=500mA	VF			0.50	V
Junction Capacitance VR = 5V, f = 1MHz	CJ		36		pF

ELECTRICAL CHARACTERISTICS CURVE

Fig 1 Typical Forward Current Derating Curve

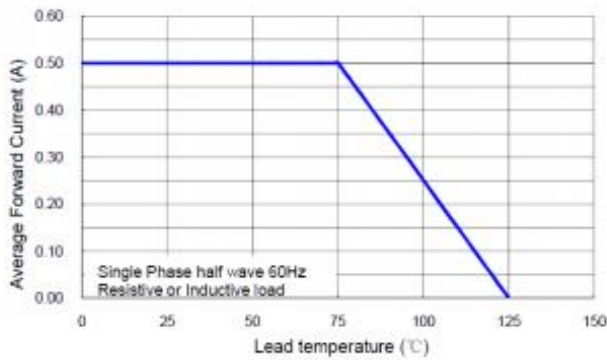


Fig 2 Total Capacitance vs. Reverse Voltage

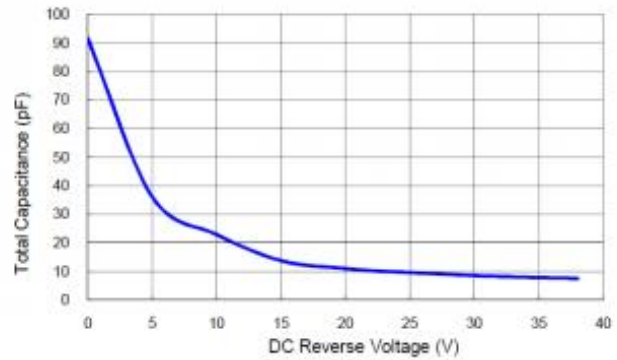


Fig 3 Typical Instantaneous Forward Characteristics

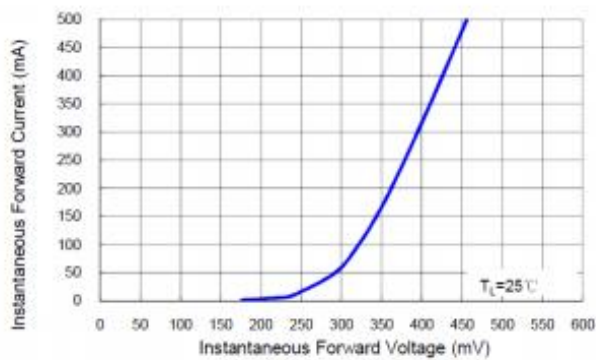
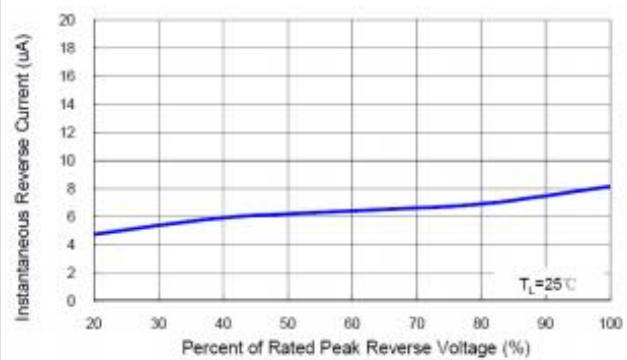
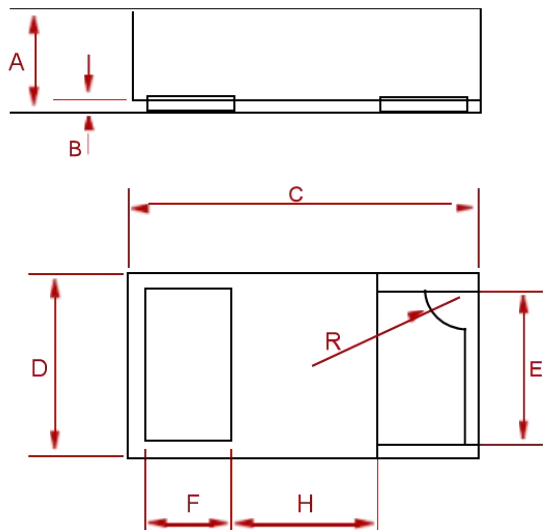


Fig 4 Typical Reverse Characteristics

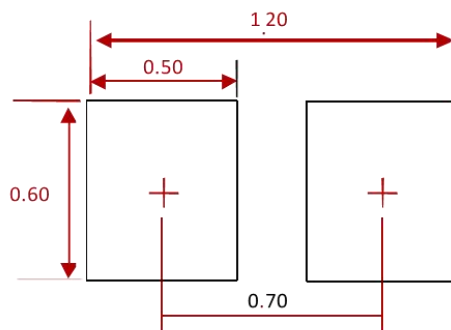


PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0.15

Suggested Pad Layout



NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

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