



BAS116L2

300mW Switching Diode

Features

- Low leakage current applications.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: JV
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

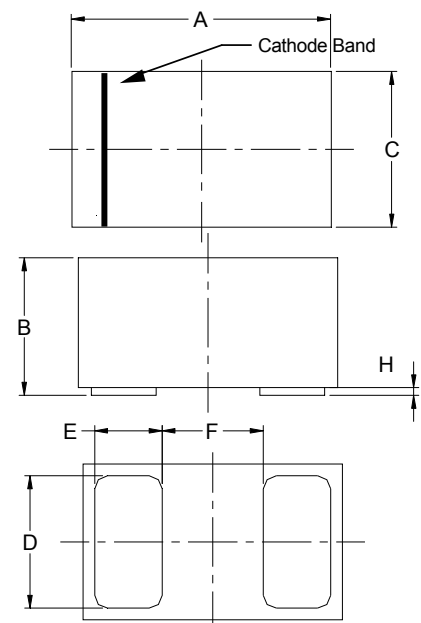
Maximum Ratings

| Rating | Symbol | Rating | Unit |
|-------------------------------------------|--------------|-------------|------|
| Reverse Voltage | V_R | 85 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 60 | V |
| Forward Continuous Current | I_{FM} | 215 | mA |
| Repetitive Peak Forward Current | I_{FRM} | 500 | mA |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | 4.0 | A |
| @ t = 1.0µs | | 1.0 | |
| @ t = 1.0ms | | 0.5 | |
| Power Dissipation | P_d | 300 | mW |
| Thermal Resistance Junction to Ambient | R_{thJA} | 417 | °C/W |
| Junction Temperature | T_J | -65 to +150 | °C |
| Storage Temperature | T_{STG} | -65 to +150 | |

Electrical Characteristics @ 25°C Unless Otherwise Specified

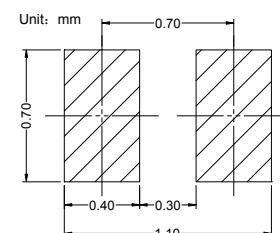
| Parameter | Symbol | Min | Typ | Max | Units |
|-----------------------------------------------------------------------------------------|-------------|-----|-----|------------------------------|-------|
| Reverse Breakdown Voltage ($I_R=100\mu A$) | $V_{(BR)R}$ | 85 | --- | --- | V |
| Forward Voltage ($I_F=1mA$) ($I_F=10mA$) ($I_F=50mA$) ($I_F=150mA$) | V_{FM} | --- | --- | 0.90 1.00 1.10 1.25 | V |
| Reverse Leakage Current ($V_R=75V$,) ($V_R=75V$, $T_J=150^\circ C$) | I_R | --- | --- | 5.0 80 | nA |
| Junction Capacitance ($V_R=0$, $f=1.0MHz$) | C_j | --- | 2.0 | --- | pF |
| Reverse Recovery Time ($I_F=I_R=10mA$ $I_{rr}=0.1*I_R$) | t_{rr} | --- | --- | 3 | µs |

DFN1006-2C



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .037 | .042 | 0.95 | 1.075 | |
| B | .019 | .021 | 0.47 | 0.53 | |
| C | .022 | .027 | 0.55 | 0.675 | |
| D | .018 | .022 | 0.45 | 0.55 | |
| E | .008 | .012 | 0.20 | 0.30 | |
| F | .016(Typ.) | | 0.40(Typ.) | | |
| H | .000 | .002 | 0.00 | 0.05 | |

SUGGESTED SOLDER PAD LAYOUT



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

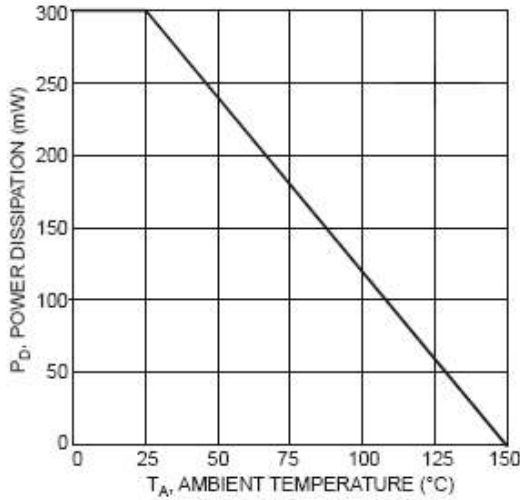


Fig. 1 Power Derating Curve, Total Package

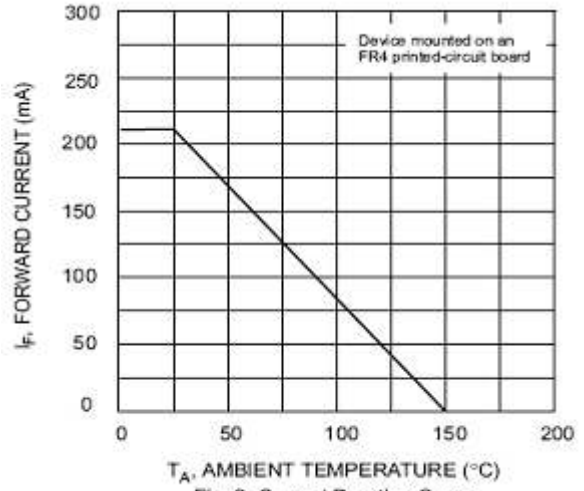


Fig. 2 Current Derating Curve

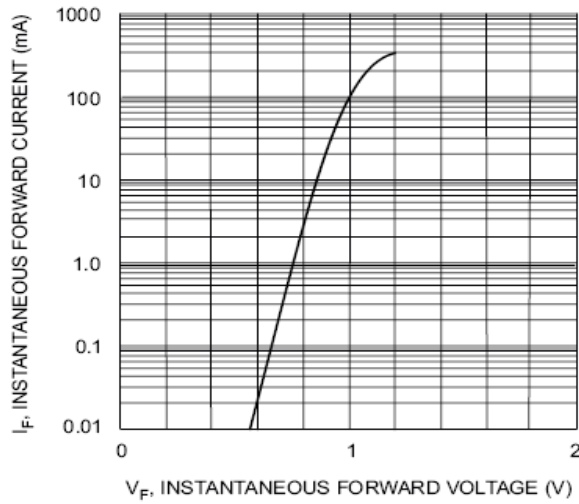


Fig. 3 Typical Forward Characteristics

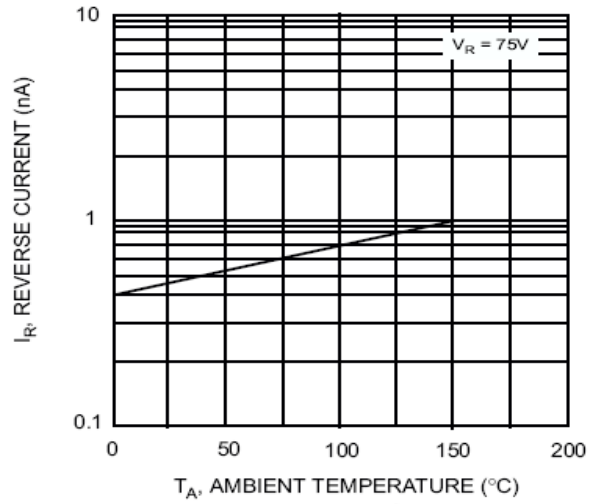


Fig. 4 Typical Reverse Characteristics



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Ordering Information :

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 10Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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