TAYCHIPST

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER

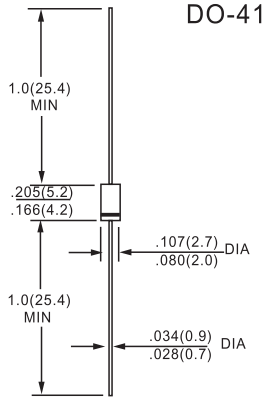
**BYV26AGP THRU BYV26EGP**

200V-1000V 1.0A

## FEATURES

- High temperature metallurgically bonded construction Sintered glass cavity free junction
- Capability of meeting environmental standard of MIL-S-19500
- High temperature soldering guaranteed 350°C /10sec/0.375"lead length at 5 lbs tension
- Operate at Ta =55°C with no thermal run away Typical Ir<0.1μA

DO-41




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| | SYMBOL | BYV26 AGP | BYV26 BGP | BYV26 CGP | BYV26 DGP | BYV26 EGP | units |
|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | Vrms | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | Vdc | 200 | 400 | 600 | 800 | 1000 | V |
| Reverse avalanche breakdown voltage at $I_R$ = 0.1 mA | $V_{(BR)R}$ (min) | 300 | 500 | 700 | 900 | 1100 | V |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C | If(av) | 1.0 | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 30 | | | | | A |
| Maximum Forward Voltage at rated Forward Current and 50°C | Vf | 2.5 | | | | | V |
| Non-repetitive peak reverse avalanche energy (Note 1) | Ersm | 10 | | | | | mJ |
| Maximum DC Reverse Current Ta =25°C<br>at rated DC blocking voltage Ta =150°C | Ir | 5.0<br>150.0 | | | | | μA<br>μA |
| Maximum Reverse Recovery Time (Note 2) | Trr | 30 | | | 75 | | nS |
| Typical Junction Capacitance (Note 3) | Cj | 15.0 | | | | | pF |
| Typical Thermal Resistance (Note 4) | R θ ja | 55.0 | | | | | °C /W |
| Storage and Operating Junction Temperature | Tstg, Tj | -65 to +175 | | | | | °C |

Note: 1.R=400mA; Tj=Tjmax prior to surge; inductive load switched off
2.Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
3.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
4.Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES BYV26AGP THRU BYV26EGP

FIG. 1 - FORWARD CURRENT DERATING CURVE

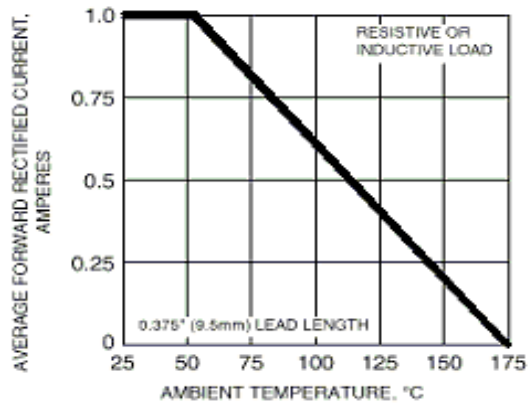



FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

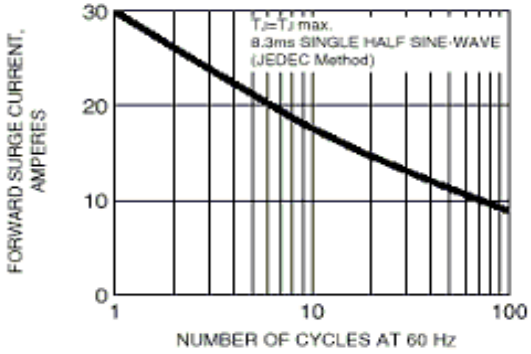



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

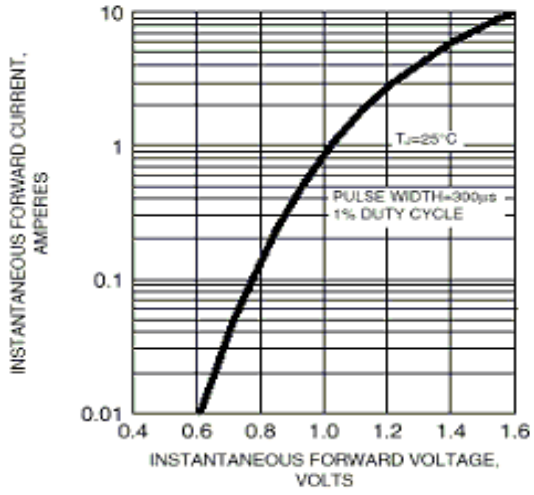



FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

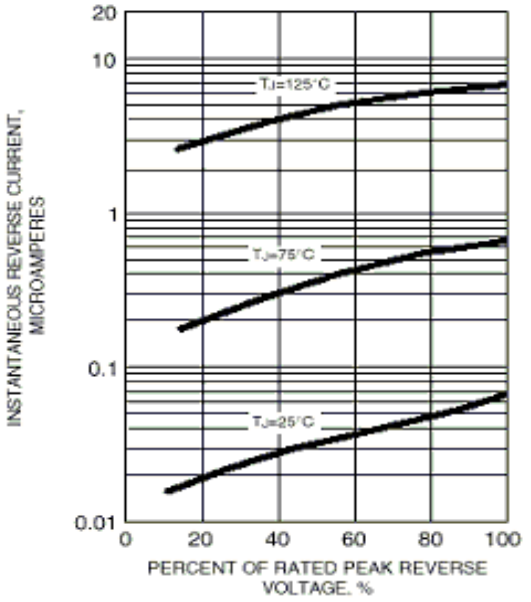



FIG. 5 - TYPICAL JUNCTION CAPACITANCE

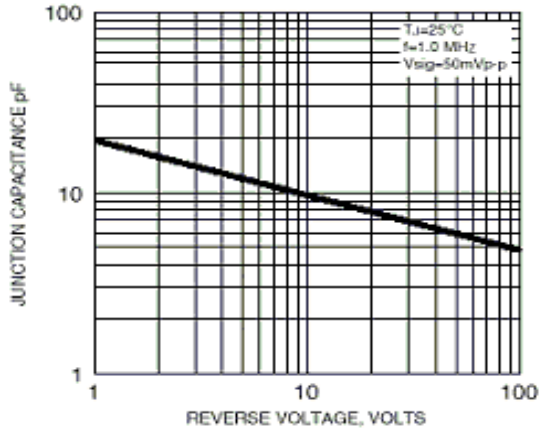



FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE