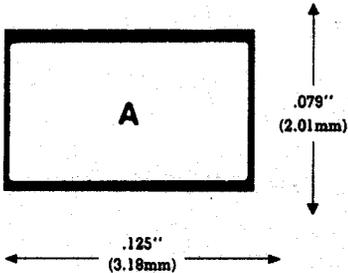


CHIP NUMBER

502



Anode: .061" x .107" (1.55mm x 2.72mm)

PN EPITAXIAL PLANAR POWER DIODE

CONTACT METALLIZATION

Anode: > 50,000 Å Aluminum

Cathode: Gold

(Polished silicon or "Chrome Nickel Silver" also available)

Also available on:

MOLY PEDESTAL

Size: .220" Diameter (5.59mm)

Thickness: .010" (0.25mm)

BeO PEDESTAL

Size: .175" x .250" (4.45mm x 6.35mm)

Thickness: .028" (0.71mm)

ASSEMBLY RECOMMENDATIONS

It is advisable that:

a) the chip be eutectically mounted with gold silicon preform 98/2%.

b) 18 mil (0.457mm) aluminum wire be ultrasonically attached to the anode contact.

TYPICAL ELECTRICAL CHARACTERISTICS AT 25°C

The following typical electrical characteristics apply for a completely finished component employing the chip number 502 in a DO-4 or equivalent case:

| Minimum V_R @ 10 μA | I_R @ 80% V_R | V_F @ | I_F | I_F Surge | Maximum t_{rr} @ $I_F = I_R = 1.0A$ $I_{REC} = 0.25A$ |
|-------------------------------|-------------------|---------|-------|-------------|--|
| > 50V | < 5 μA | 1.2V | 12A | > 200A | 250 ns |
| > 100V | < 5 μA | 1.2V | 12A | > 200A | 250 ns |
| > 200V | < 5 μA | 1.2V | 12A | > 200A | 250 ns |
| > 300V | < 5 μA | 1.2V | 12A | > 200A | 250 ns |
| > 400V | < 5 μA | 1.2V | 12A | > 200A | 450 ns |

TYPICAL DEVICE TYPES: 1N3889, 1N3890, 1N3891, 1N3892

I_F surge $\geq 200A$.