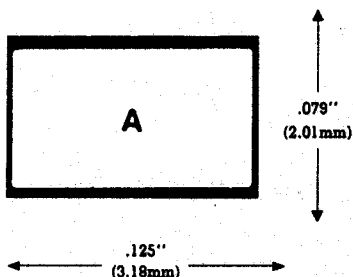


**CHIP NUMBER**

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 $\mu A$	$I_R$ @ 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 $\mu A$	1.2V	12A	> 200A	250 ns
> 100V	< 5 $\mu A$	1.2V	12A	> 200A	250 ns
> 200V	< 5 $\mu A$	1.2V	12A	> 200A	250 ns
> 300V	< 5 $\mu A$	1.2V	12A	> 200A	250 ns
> 400V	< 5 $\mu A$	1.2V	12A	> 200A	450 ns

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

$I_F$  surge  $\geq 200A$ .