

**269**

PNP EPITAXIAL

PLANAR POWER TRANSISTOR \*

(FORMERLY 69)

**MEDIUM TO HIGH VOLTAGE, FAST SWITCHING**

## CONTACT METALLIZATION

Base and emitter: &gt; 30,000 Å Aluminum

Collector: Polished Silicon

(Gold and Chrome Silver also available)

Also available on:

## MOLY PEDESTAL

Size: .140" Diameter (3.56mm)

Thickness: .010" (0.25mm)

## BeO PEDESTAL

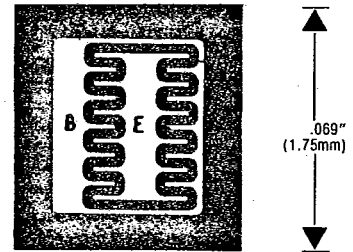
Size: .142" x .178" (3.61mm x 4.52mm)

Thickness: .023" (0.58mm)

## ASSEMBLY RECOMMENDATIONS

It is advisable that:

- the die be mounted with appropriate gold silicon preform 98/2%.
- 8 mil (0.203mm) aluminum wire be ultrasonically attached to the base and emitter contacts.

Base Contact:  
Emitter:.009" x .050"  
.009" x .042"(0.23mm x 1.27mm)  
(0.23mm x 1.07mm)**TYPICAL ELECTRICAL CHARACTERISTICS AT 25°C**

The following typical electrical characteristics apply for a completely finished component employing the element number 269 in a TO-66 or equivalent case:

$V_{CE0}$	$V_{CE(s)}$	@	$I_C$	$I_B$	$h_{FE}$	@	$I_C$	$V_{CE}$
> 60V	< 0.35V		0.5A	50mA	> 15		2A	5V
> 80V	< 0.35V		0.5A	50mA	> 15		2A	5V
> 100V	< 0.35V		0.5A	50mA	> 15		2A	5V
> 150V	< 0.35V		0.5A	50mA	> 5		2A	5V
> 200V	< 0.35V		0.5A	50mA	> 5		2A	5V

$V_{CE0}$	$V_{CES}$	$V_{EBO}$	$f_T$	$C_{OB0}$	$\theta_{JC}$
> 60V	70V	> 5V	40MHz	< 60pF	< 25°C/W
> 80V	90V	> 5V	40MHz	< 60pF	< 25°C/W
> 100V	110V	> 5V	40MHz	< 60pF	< 25°C/W
> 150V	160V	> 5V	40MHz	< 60pF	< 25°C/W
> 200V	210V	> 5V	40MHz	< 60pF	< 25°C/W

TYPICAL DEVICE TYPES: JAN2N3740, JAN2N3741, SDT69601 - SDT69613, SDT69501 - SDT69513

 $h_{FE}$  ranges available at  $I_C = 500mA$ ,  $V_{CE} = 5V$ , 30-90, 40-120, 50-150, > 100 with  $V_{CE0} < 150V$ .

\*The respective NPN complement is element number 191.