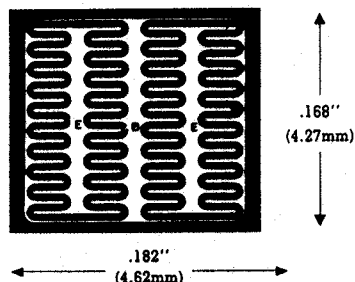


CHIP NUMBER

144



Base: .010" x .142" (0.25mm x 3.61mm)
 Emitter: .010" x .130" (0.25mm x 3.30mm)

NPN TRIPLE DIFFUSED PLANAR POWER TRANSISTOR (FORMERLY 44)

CONTACT METALLIZATION

Base and emitter: > 50,000 Å Aluminum

Collector: Gold

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

Also available on:

MOLY PEDESTAL

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

Thickness: .010" (0.25mm)

BeO PEDESTAL

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

Thickness: .042" (1.07mm)

ASSEMBLY RECOMMENDATIONS

It is advisable that:

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

b) 8 mil (0.203mm) aluminum wire be ultrasonically attached to the base and emitter contacts.

TYPICAL ELECTRICAL CHARACTERISTICS AT 25°C

The following typical electrical characteristics apply for a completely finished component employing the chip number 144 in a TO-3 or equivalent case:

V _{CEO}	V _{CE(s)} @	I _C	I _B	h _{FE} @	I _C	V _{CE}
> 60V	<0.5V	10A	1A	>10	30A	5V
> 80V	<0.5V	10A	1A	>10	30A	5V
>100V	<0.5V	10A	1A	>10	30A	5V
* >150V	<0.5V	10A	1A	>10	30A	5V
* >200V	<0.5V	10A	1A	> 5	30A	5V

V _{CEO}	V _{CEX}	V _{EBO}	f _T	C _{OBO}	θ _{JC}
> 60V	70V	>8V	40MHz	<300pF	<1.0°C/W
> 80V	90V	>8V	40MHz	<300pF	<1.0°C/W
>100V	110V	>8V	40MHz	<300pF	<1.0°C/W
>150V	160V	>8V	40MHz	<300pF	<1.0°C/W
>200V	210V	>8V	40MHz	<300pF	<1.0°C/W

TYPICAL DEVICE TYPES: SDT44331, SDT44335, BUY 58, 2N6338, 2N6341, 2N5330

*h_{FE} available at I_C = 10A, V_{CE} = 5V, >20

