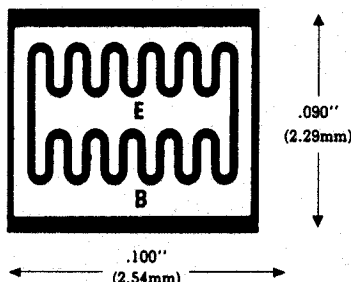


CHIP NUMBER

184



Base: .077" x .0075" (1.96mm x 0.19mm)
Emitter: .010" x .063" (0.25mm x 1.60mm)

NPN EPITAXIAL/TRIPLE DIFFUSED PLANAR POWER TRANSISTOR** (FORMERLY 84)

CONTACT METALLIZATION

Base and emitter: > 30,000 Å Aluminum

Collector: Gold

(Polished silicon or "Chrome Nickel 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 chip be eutectically mounted with gold silicon preform 98/2%.
- 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 184 in a TO-5 or equivalent case:

V _{CEO}	V _{CE(s)} @	I _C	I _B	h _{FE} @	I _C	V _{CE}
> 60V	< 0.2V	1A	0.1A	> 20	5A	5V
> 80V	< 0.2V	1A	0.1A	> 20	5A	5V
> 100V	< 0.2V	1A	0.1A	> 20	5A	5V
> 150V	< 0.3V	1A	0.1A	> 10	5A	5V
* > 200V	< 0.3V	1A	0.1A	> 5	5A	5V

V _{CEO}	V _{CEX}	V _{EB0}	f _T	C _{OB0}	θ _{JC}
> 60V	80V	> 8V	50MHz	< 120pF	< 20°C/W
> 80V	100V	> 8V	50MHz	< 120pF	< 20°C/W
> 100V	120V	> 8V	50MHz	< 120pF	< 20°C/W
> 150V	160V	> 8V	50MHz	< 120pF	< 20°C/W
> 200V	210V	> 8V	50MHz	< 120pF	< 20°C/W

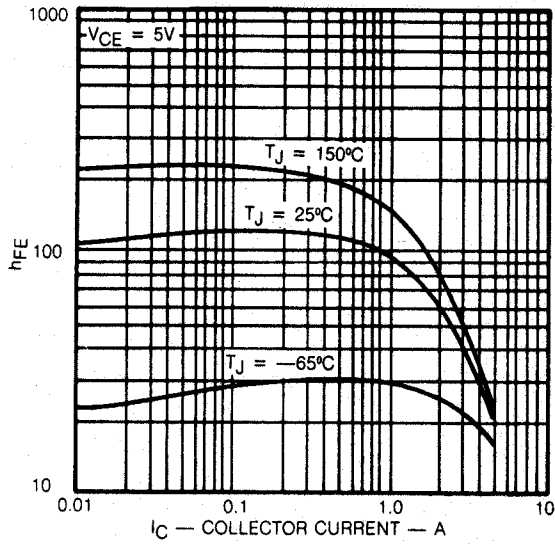
TYPICAL DEVICE TYPES: JAN2N2880, JAN2N3749, JAN2N3996 - JAN2N3999, 2N2658, SDT9001 thru SDT9012

*h_{FE} available at I_C = 1.0A, V_{CE} = 5.0V, > 10

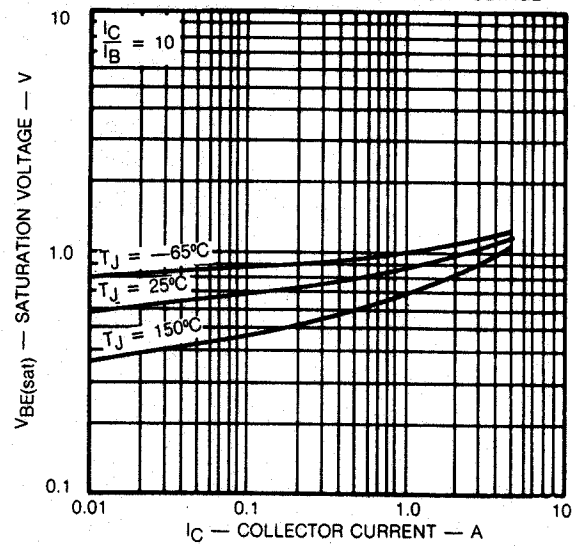
**The respective PNP complement is chip number 271.

MEDIUM TO HIGH VOLTAGE, FAST SWITCHING
CHIP TYPE 184

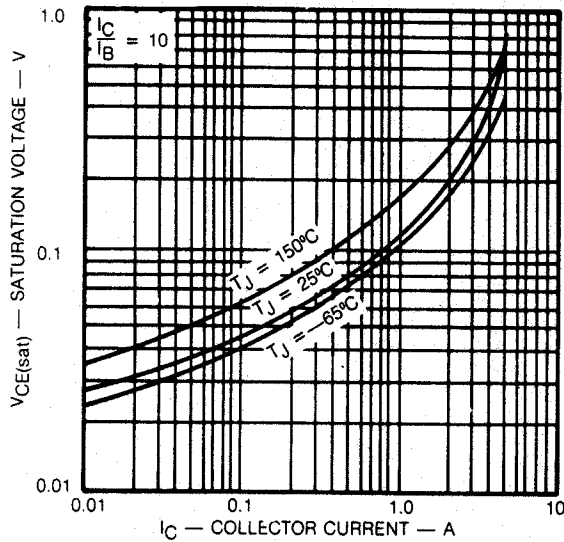
TYPICAL STATIC FORWARD CURRENT TRANSFER RATIO



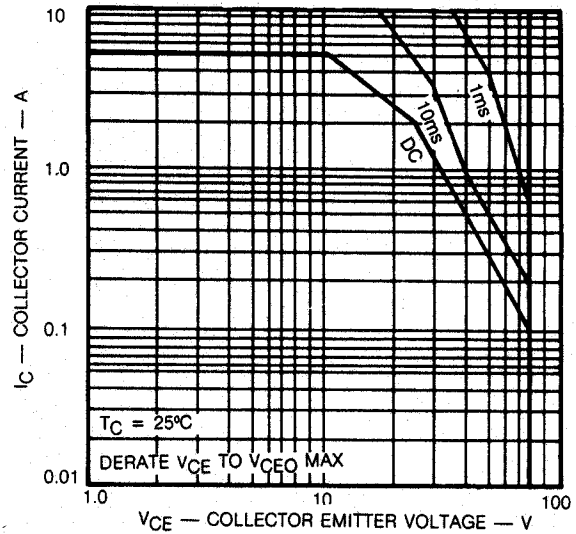
TYPICAL BASE EMITTER SATURATION VOLTAGE



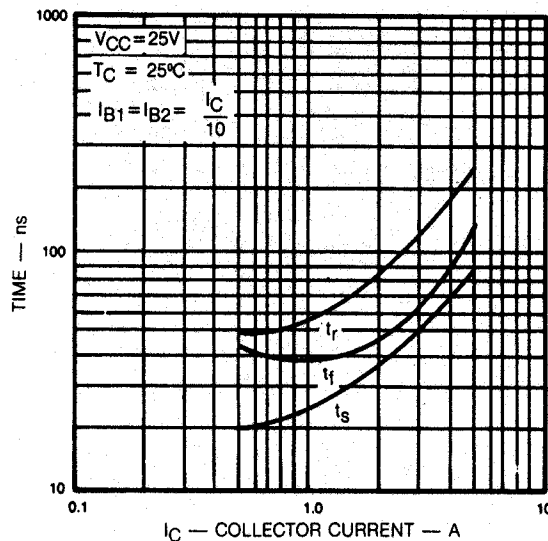
TYPICAL COLLECTOR EMITTER SATURATION VOLTAGE



MAXIMUM OPERATING CONDITIONS



TYPICAL SWITCHING TIME
NON SATURATED



NOTE:
PERFORMANCE CURVES
REPRESENT LOW TO
MIDDLE CEO VOLTAGE
RANGE OF THIS PRODUCT