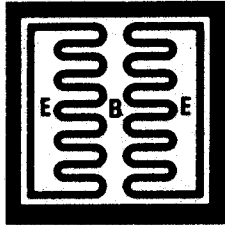


CHIP NUMBER

185



.146"
(3.71mm)

.146"
(3.71mm)

Base: .012" x .112" (0.30mm x 2.85mm)
Emitter: .012" x .096" (0.30mm x 2.44mm)

**NPN EPITAXIAL/TRIPLE DIFFUSED
PLANAR POWER TRANSISTOR** (FORMERLY 85)**

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: .220" Diameter (5.59mm)
Thickness: .010" (0.25mm)

BeO PEDESTAL

Size: .175" x .250" (4.45mm x 6.53mm)
Thickness: .032" (0.81mm)

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 185 in a TO-3 or equivalent case:

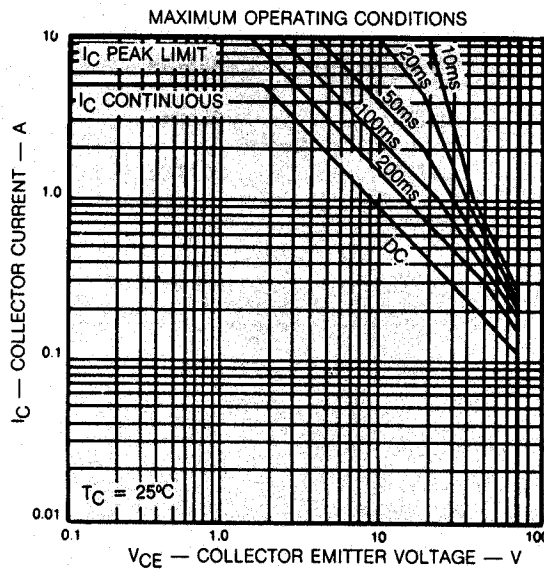
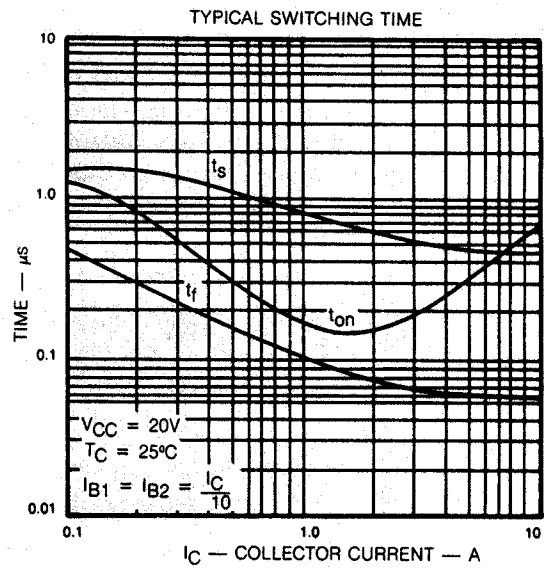
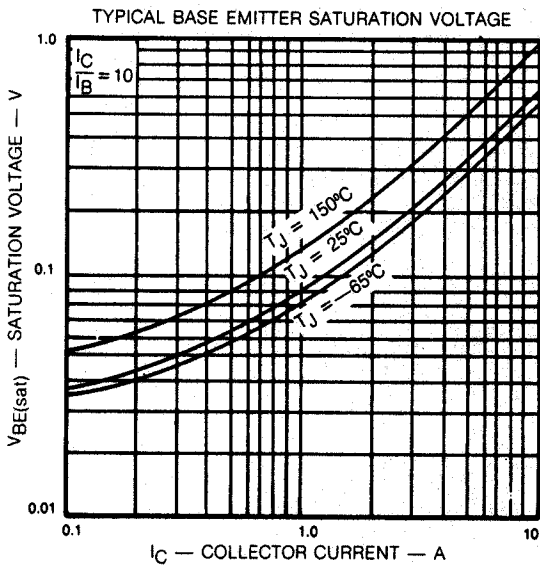
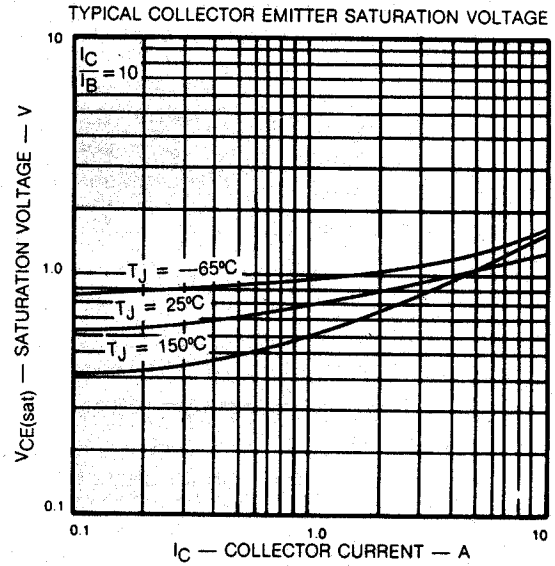
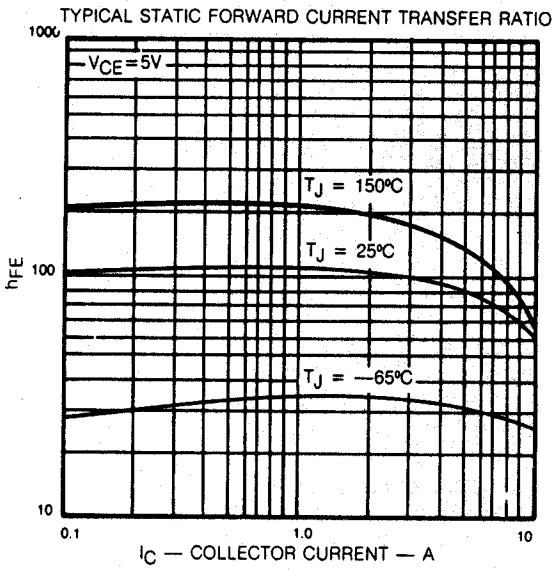
V _{CEO}	V _{CE(s)} @	I _C	I _B	h _{FE} @	I _C	V _{CE}
> 60V	<0.5V	5A	0.5A	>20	10A	5V
> 80V	<0.5V	5A	0.5A	>20	10A	5V
>100V	<0.5V	5A	0.5A	>20	10A	5V
>150V	<0.5V	5A	0.5A	>15	10A	5V
>175V	<0.5V	5A	0.5A	>15	10A	5V
* >200V	<0.5V	5A	0.5A	> 5	10A	5V

V _{CEO}	V _{CEX}	V _{EBO}	f _T	C _{OBO}	θ _{JC}
> 60V	80V	>8V	40MHz	<300pF	<1.25°C/W
> 80V	100V	>8V	40MHz	<300pF	<1.25°C/W
>100V	120V	>8V	40MHz	<300pF	<1.25°C/W
>150V	170V	>8V	40MHz	<300pF	<1.25°C/W
>175V	190V	>8V	40MHz	<300pF	<1.25°C/W
>200V	210V	>8V	40MHz	<300pF	<1.25°C/W

TYPICAL DEVICE TYPES: 2N4070, 2N4071, JAN2N4150, JAN2N5237, JAN2N5238, SDT7A05, SDT7601 - SDT7618, SDT85305
*h_{FE} available at I_C = 5A, V_{CE} = 5V, >10

**The respective PNP complement is chip number 263.

MEDIUM TO HIGH VOLTAGE, FAST SWITCHING
CHIP TYPE 185



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