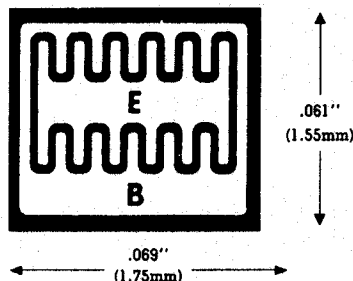


CHIP NUMBER

205



Base: .009" x .050" (0.23mm x 1.27mm)
Emitter: .009" x .042" (0.23mm x 1.07mm)

PNP EPITAXIAL PLANAR POWER TRANSISTOR **

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 205 in a TO-66 or equivalent case:

V _{CEO}	V _{CE(s)} @	I _C	I _B	h _{FE} @	I _C	V _{CE}
>30V	<0.5V	1A	0.1A	>20	2A	2V
>45V	<0.5V	1A	0.1A	>20	2A	2V
>60V	<0.5V	1A	0.1A	>20	2A	2V
>80V	<0.5V	1A	0.1A	>20	2A	2V

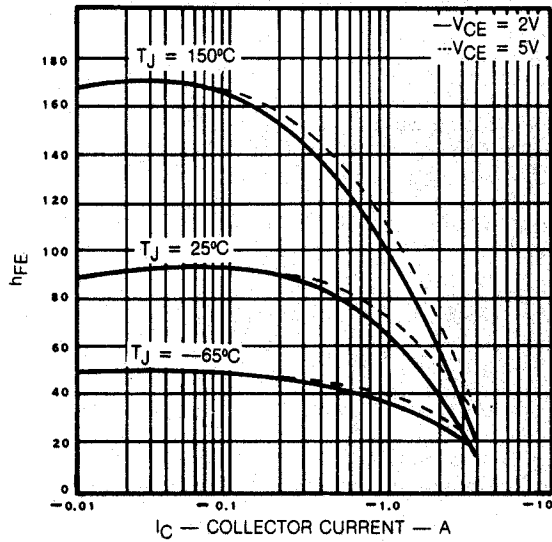
V _{CEO}	V _{CEX}	V _{EBO}	f _T	C _{OBO}	θ _{JC}
>30V	40V	>5V	45MHz	<60pF	<6°C/W
>45V	55V	>5V	45MHz	<60pF	<6°C/W
>60V	70V	>5V	45MHz	<60pF	<6°C/W
>80V	90V	>5V	45MHz	<60pF	<6°C/W

TYPICAL DEVICE TYPES: SDT05573, SDT05673

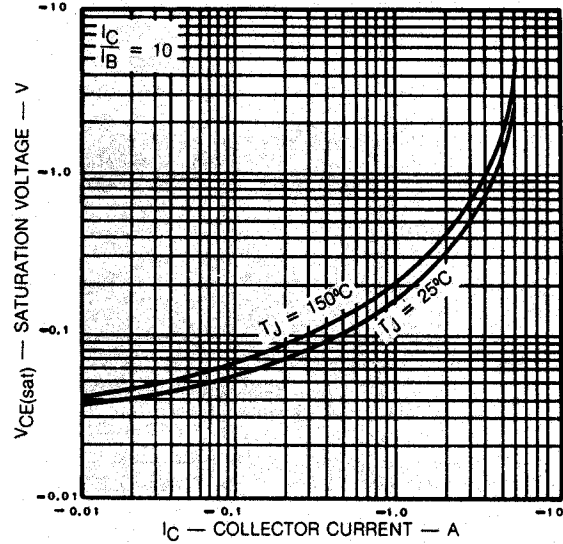
h_{FE} available at I_C = 200mA, V_{CE} = 2V, >25

**The respective NPN complement is chip number 107.

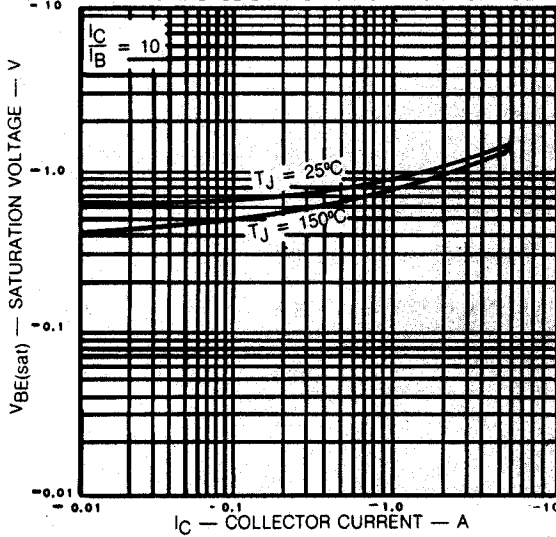
TYPICAL STATIC FORWARD CURRENT TRANSFER RATIO



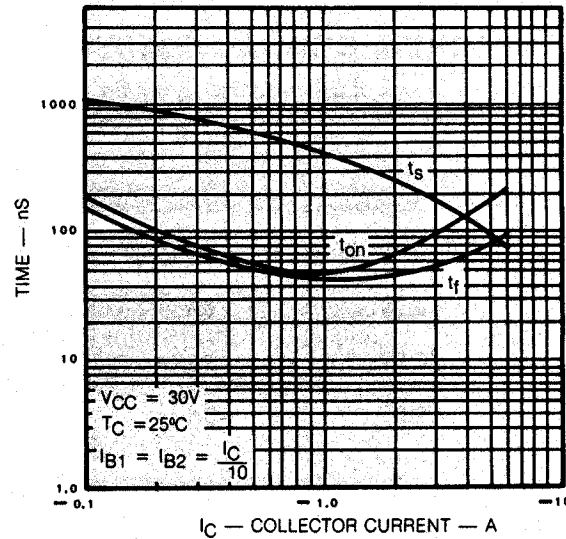
TYPICAL COLLECTOR EMITTER SATURATION VOLTAGE



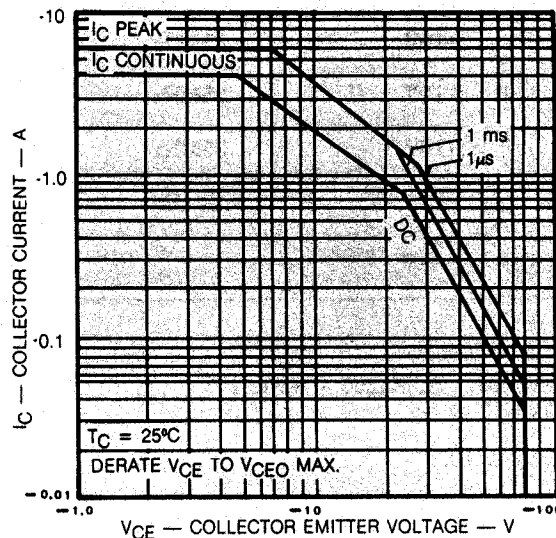
TYPICAL BASE EMITTER SATURATION VOLTAGE



TYPICAL SWITCHING TIME



MAXIMUM OPERATING CONDITIONS



NOTE:
PERFORMANCE CURVES
REPRESENT LOW TO
MIDDLE V_{CE0} VOLTAGE
RANGE OF THIS PRODUCT