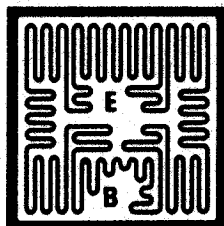


CHIP NUMBER

118



.242"
(6.15mm)

.242"
(6.15mm)

Base: .042" x .021" (1.07mm x 0.53mm)
Emitter: .042" x .021" (1.07mm x 0.53mm)

NPN PASSIVATED POWER TRANSISTOR

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: .375" Diameter (9.53mm)

Thickness: .020" (0.51mm)

BeO PEDESTAL

Size: .250" x .312" (6.35mm x 7.92mm)

Thickness: .042" (1.07mm)

ASSEMBLY RECOMMENDATIONS

It is advisable that:

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

b) 12 mil (0.305mm) 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 118 in a TO-3 or equivalent case:

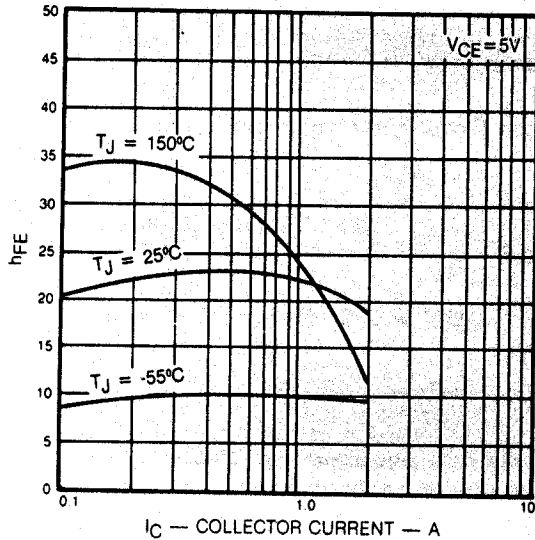
V _{CEO}	V _{CE(s)} @	I _C	I _B	h _{FE} @	I _C	V _{CE}
> 500V	< 5V	4.5A	2A	> 2.25	4.5A	5V
> 600V	< 5V	4.5A	2A	> 2.25	4.5A	5V
> 700V	< 5V	4.5A	2A	> 2.25	4.5A	5V

V _{CEO}	V _{CEX}	V _{EBO}	f _T	C _{OBO}	θ _{JC}
> 500V	1000V	> 5	2MHz	< 200PF	< 1.6°C/W
> 600V	1300V	> 5	2MHz	< 200PF	< 1.6°C/W
> 700V	1500V	> 5	2MHz	< 200PF	< 1.6°C/W

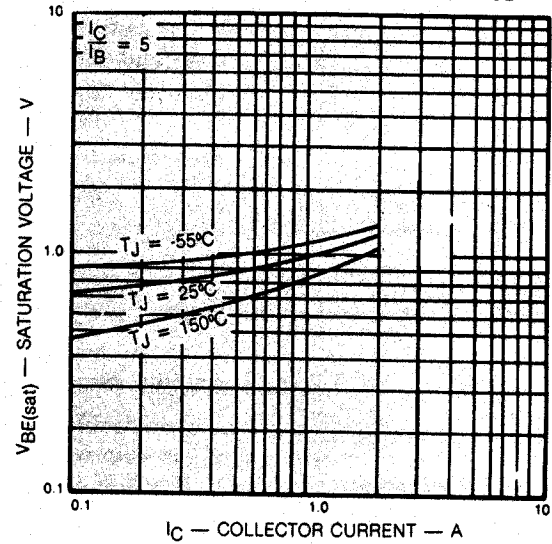
TYPICAL DEVICE TYPES: BU208, SDT723, SDT802, SDT18801

CHIP TYPE 118

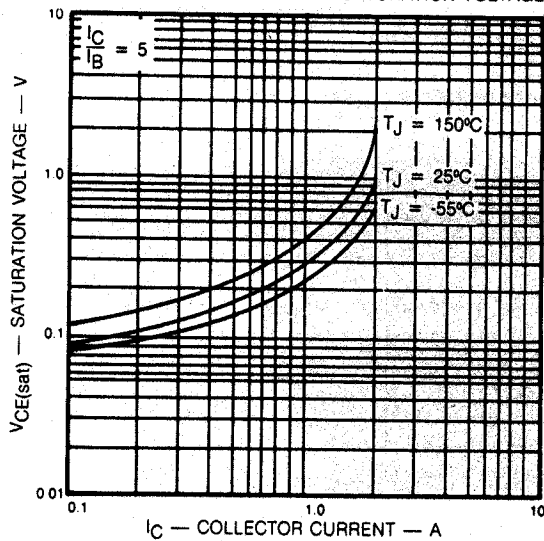
TYPICAL STATIC FORWARD CURRENT TRANSFER RATIO



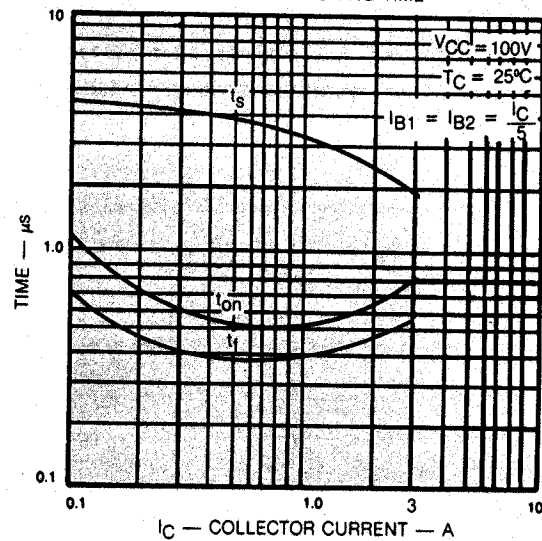
TYPICAL BASE-EMITTER SATURATION VOLTAGE



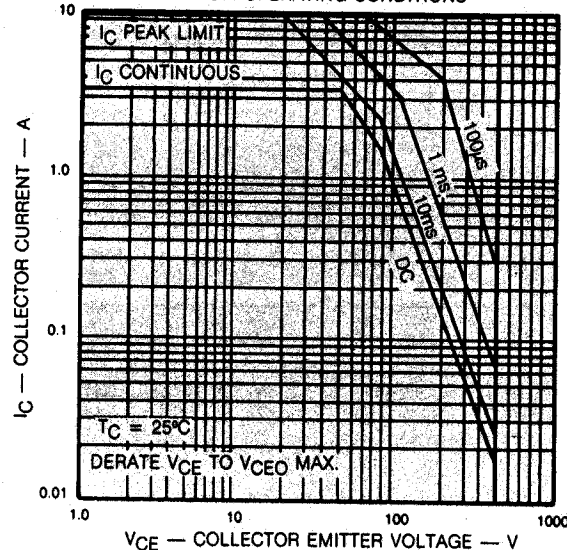
TYPICAL COLLECTOR-EMITTER SATURATION VOLTAGE



TYPICAL SWITCHING TIME



MAXIMUM OPERATING CONDITIONS



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