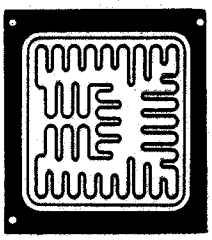
CHIP NUMBER

141



.158"
(3.40mm)

.154"
(3.56mm)

Base: .047" x .012" (1.19mm x .30mm)
Emitter: .048" x .012" (1.22mm x .30mm)

NPN TRIPLE DIFFUSED 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 .220" Diameter (5.59mm)
Thickness .010" (0.25mm)

BeO PEDESTAL
Size .175" x .250" (4.45mm x 6.35mm)
Thickness .028" (0.71mm)

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 141 in a TO-3 or equivalent case:

V_{CEO}	$V_{CE(s)}$ @	I_C	I_B	h_{FE} @	I_C	V_{CE}
>600V	<1.0V	1A	.2A	>2.5	2.5A	5V
>700V	<1.0V	1A	.2A	>2.5	2.5A	5V
>800V	<1.0V	1A	.2A	>2.5	2.5A	5V
>900V	<1.0V	1A	.2A	>2.5	2.5A	5V

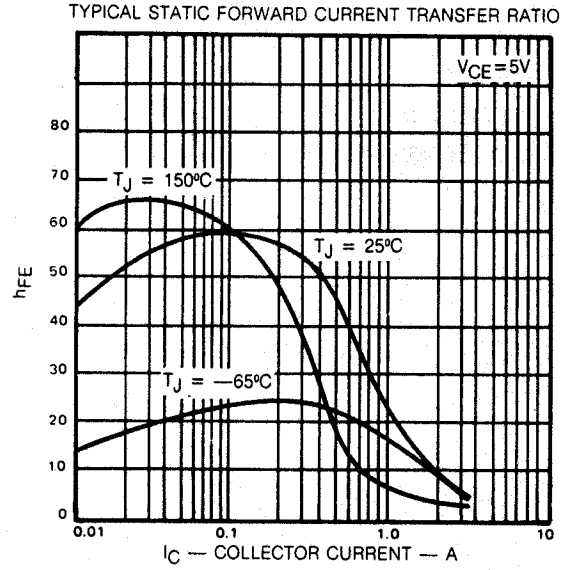
V_{CEO}	V_{CEX}	V_{EBO}	f_T	C_{OBO}	θ_{JC}
>600V	800V	20V	1.5MHz	<100pF	<1.25°C/W
>700V	900V	20V	1.5MHz	<100pF	<1.25°C/W
>800V	1000V	20V	1.5MHz	<100pF	<1.25°C/W
>900V	1100V	20V	1.5MHz	<100pF	<1.25°C/W

TYPICAL DEVICE TYPES: SDT41301 - SDT41306

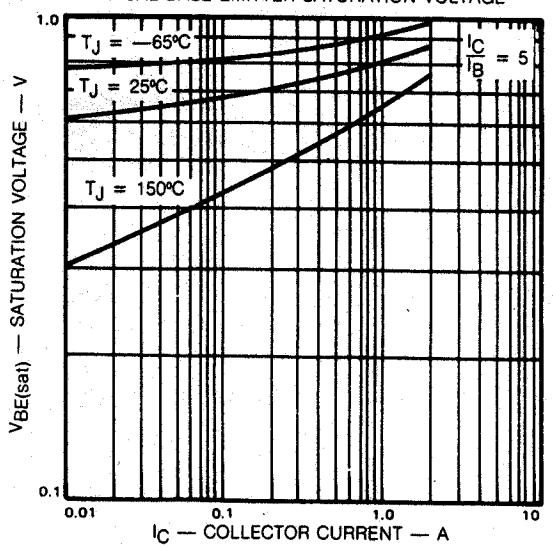
I_{CEX} available to 1400V.

CHIP TYPE 141

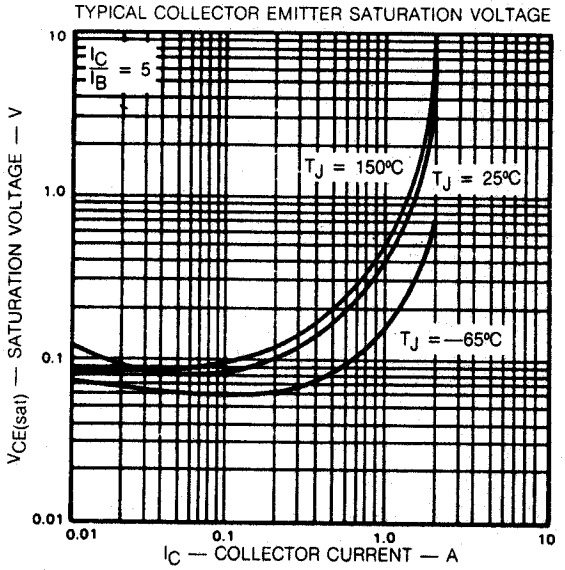
TYPICAL STATIC FORWARD CURRENT TRANSFER RATIO



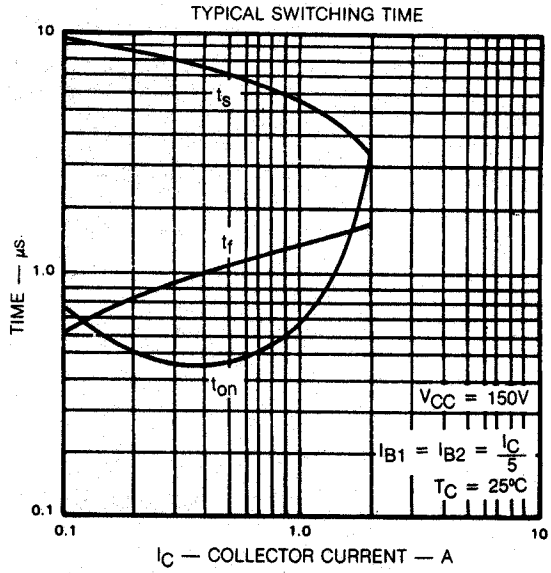
TYPICAL BASE EMITTER SATURATION VOLTAGE



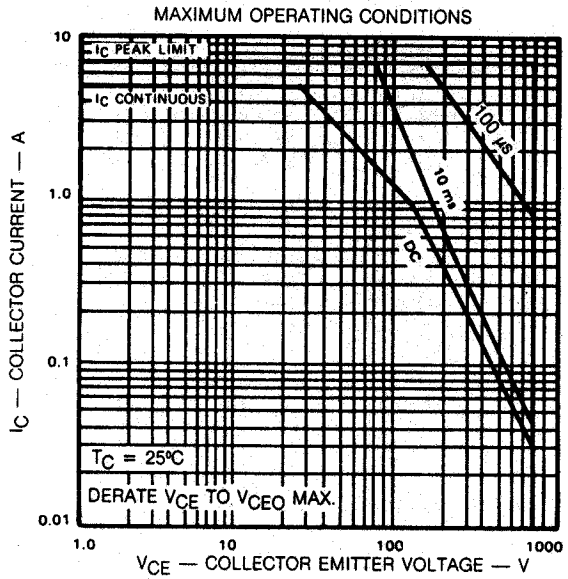
TYPICAL COLLECTOR EMITTER SATURATION VOLTAGE



TYPICAL SWITCHING TIME



MAXIMUM OPERATING CONDITIONS



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