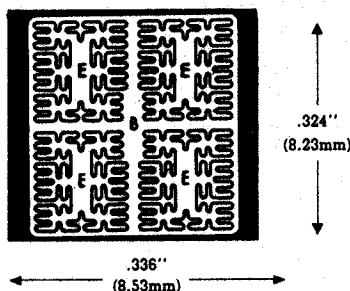


### CHIP NUMBER

# 155



Base: .026" x .099" (0.66mm x 2.51mm)  
Emitter: .026" x .080" (0.66mm x 2.03mm)

### NPN EPITAXIAL PLANAR POWER TRANSISTOR (FORMERLY 55)

#### 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: .470" x .470" (11.94mm x 11.94mm)

Thickness: .020" (0.51mm)

#### BeO PEDESTAL

Size: .430" x .500" (10.92mm x 12.70mm)

Thickness: .060" (2.16mm)

#### ASSEMBLY RECOMMENDATIONS

It is advisable that:

- the chip be eutectically mounted with gold silicon preform 98/2%.
- 18 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 155 in a TO-114 or equivalent case:

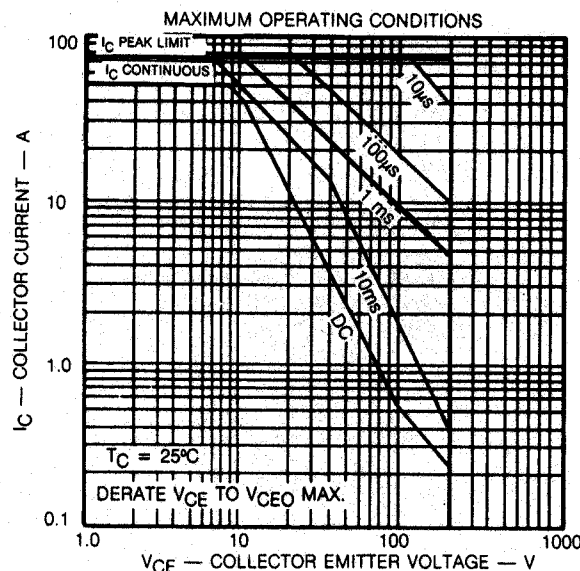
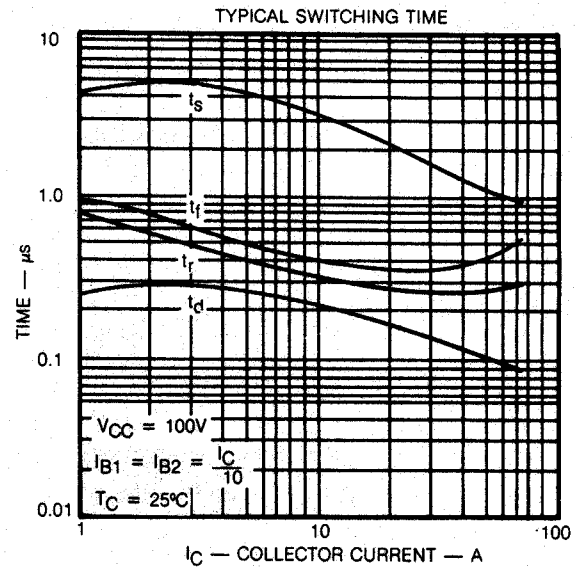
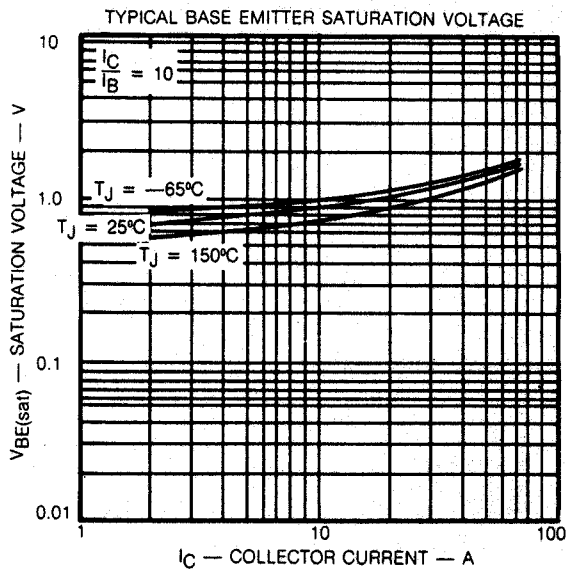
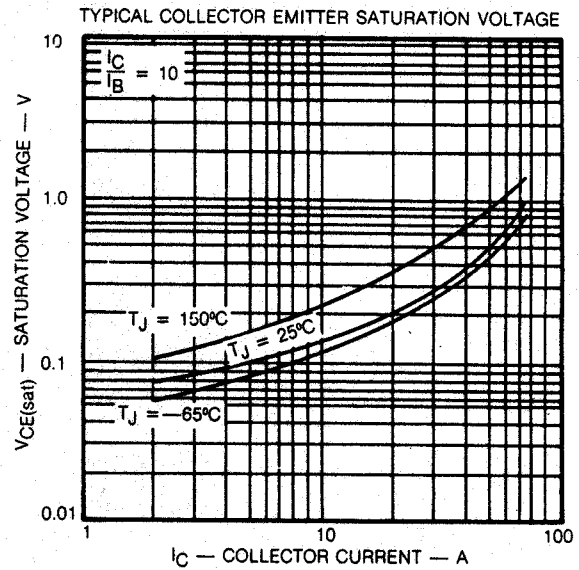
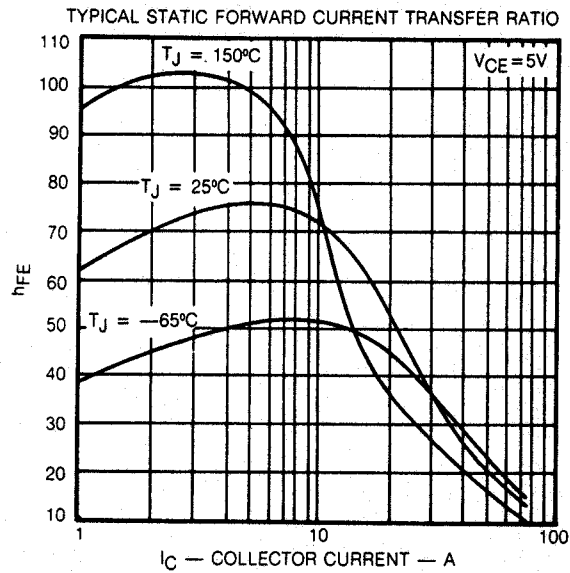
V <sub>CEO</sub>	V <sub>CE(s)</sub> @	I <sub>C</sub>	I <sub>B</sub>	h <sub>FE</sub> @	I <sub>C</sub>	V <sub>CE</sub>
> 80V	<0.8V	100A	10.0A	>5	150A	5V
>100V	<0.8V	100A	10.0A	>5	150A	5V
>120V	<0.8V	100A	10.0A	>5	150A	5V
>150V	<1.4V	75A	7.5A	>5	100A	5V
* >175V	<1.4V	75A	7.5A	>5	100A	5V
* >200V	<1.4V	75A	7.5A	>5	100A	5V

V <sub>CEO</sub>	V <sub>CEX</sub>	V <sub>EBO</sub>	f <sub>T</sub>	C <sub>OBO</sub>	θ <sub>JC</sub>
> 80V	100V	>8V	10MHz	<1200pF	<0.33°C/W
>100V	125V	>8V	10MHz	<1200pF	<0.33°C/W
>120V	150V	>8V	10MHz	<1200pF	<0.33°C/W
>150V	175V	>8V	10MHz	<1200pF	<0.33°C/W
>175V	200V	>8V	10MHz	<1200pF	<0.33°C/W
>200V	225V	>8V	10MHz	<1200pF	<0.33°C/W

TYPICAL DEVICE TYPES: SDT55407, SDT55503, SDT55905

\*h<sub>FE</sub> available at I<sub>C</sub> = 50A, V<sub>CE</sub> = 5V, >10

**MEDIUM TO HIGH VOLTAGE, HIGH CURRENT**  
**CHIP TYPE 155**



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