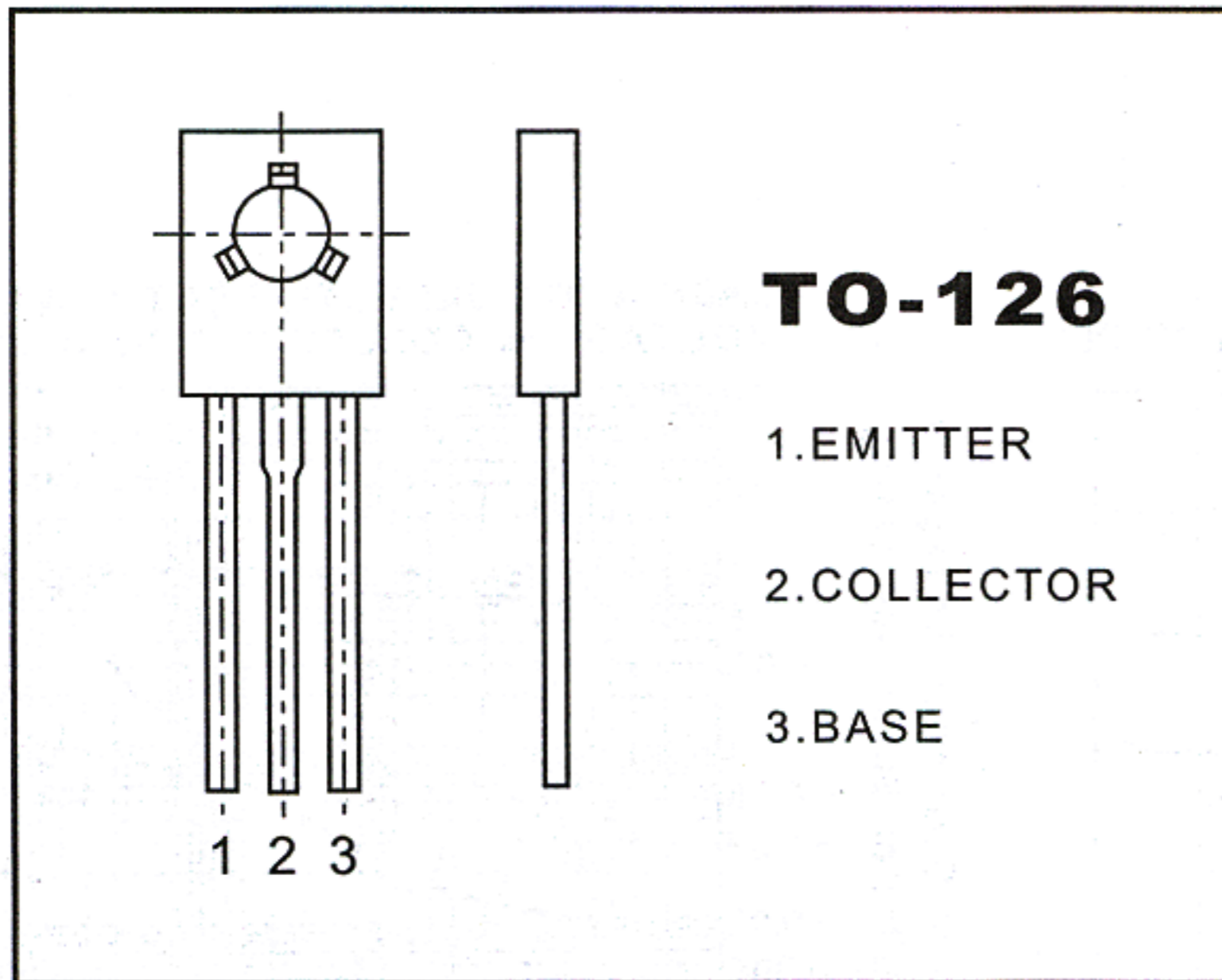


# TO-126 Plastic-Encapsulate Transistors

## B772 TRANSISTOR(PNP)



### FEATURES

#### Power dissipation

$P_{CM}$ : 1.25W ( $T_{amb}=25^{\circ}C$ )

#### Collector current

$I_{CM}$ : -3 A

#### Collector-base voltage

$V_{(BR)CBO}$ : -40 V

#### Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

### ELECTRICAL CHARACTERISTICS

( $T_{amb}=25^{\circ}C$  unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10 mA, I_B = 0$	-30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40 V, I_E = 0$		-1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -30 V, I_B = 0$		-1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -6 V, I_C = 0$		-1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 V, I_C = -1 A$	60	400	
	$h_{FE(2)}$	$V_{CE} = -2 V, I_C = -100 mA$	32		
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C = -2 A, I_B = -0.2 A$		-0.5	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C = -2 A, I_B = -0.2 A$		-2	V
Transition frequency	$f_T$	$V_{CE} = -5 V, I_C = -0.1 A$ $f = 10 MHz$	50		MHz

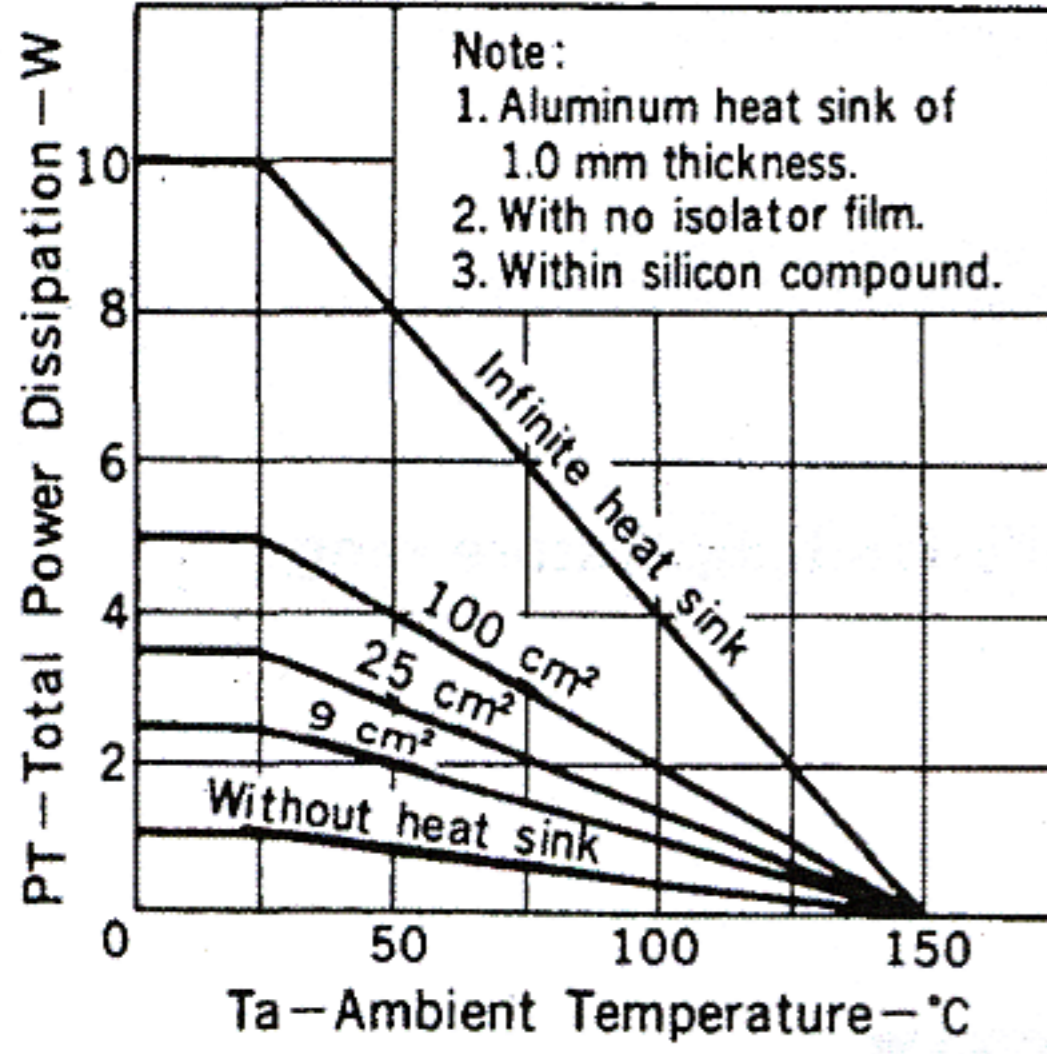
### CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

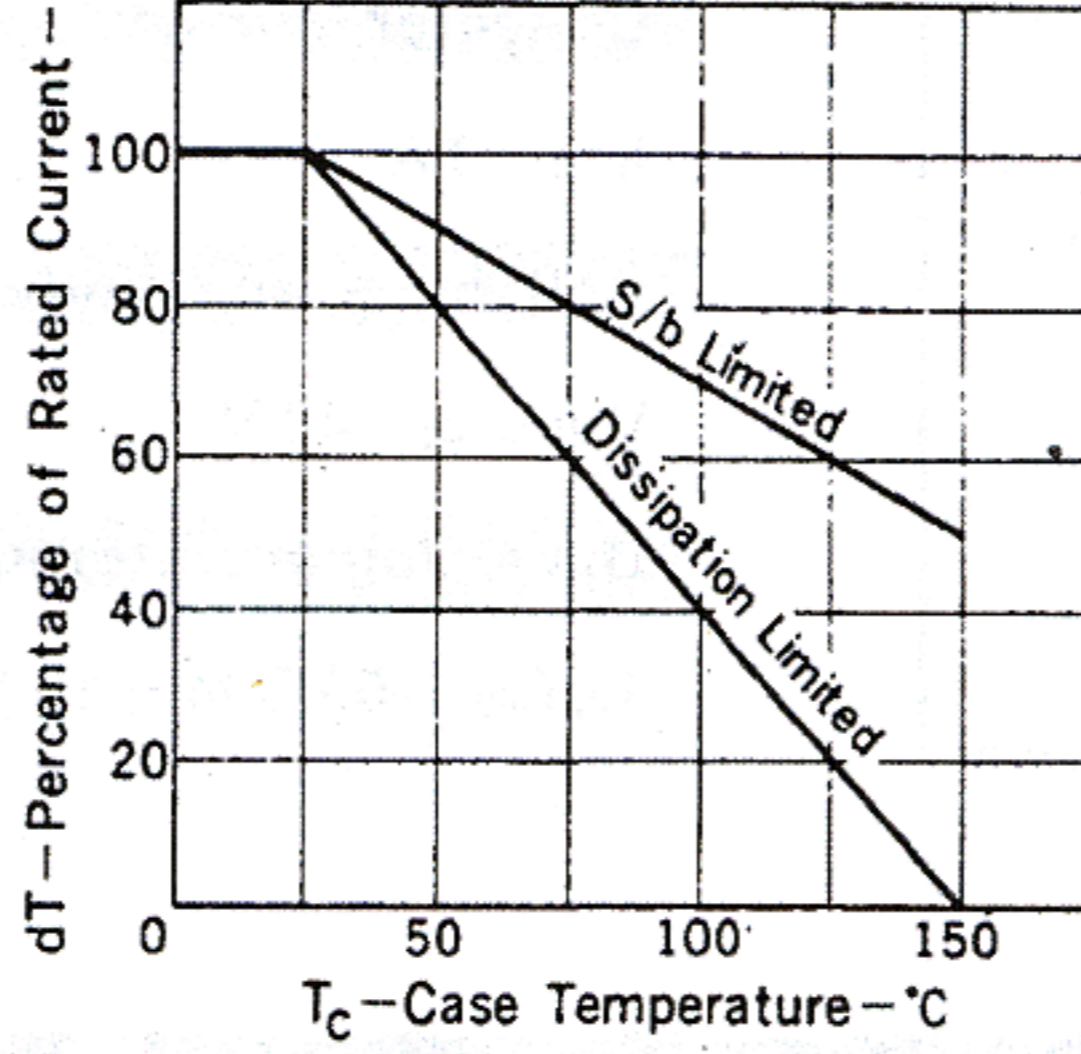
# Typical Characteristics

B772

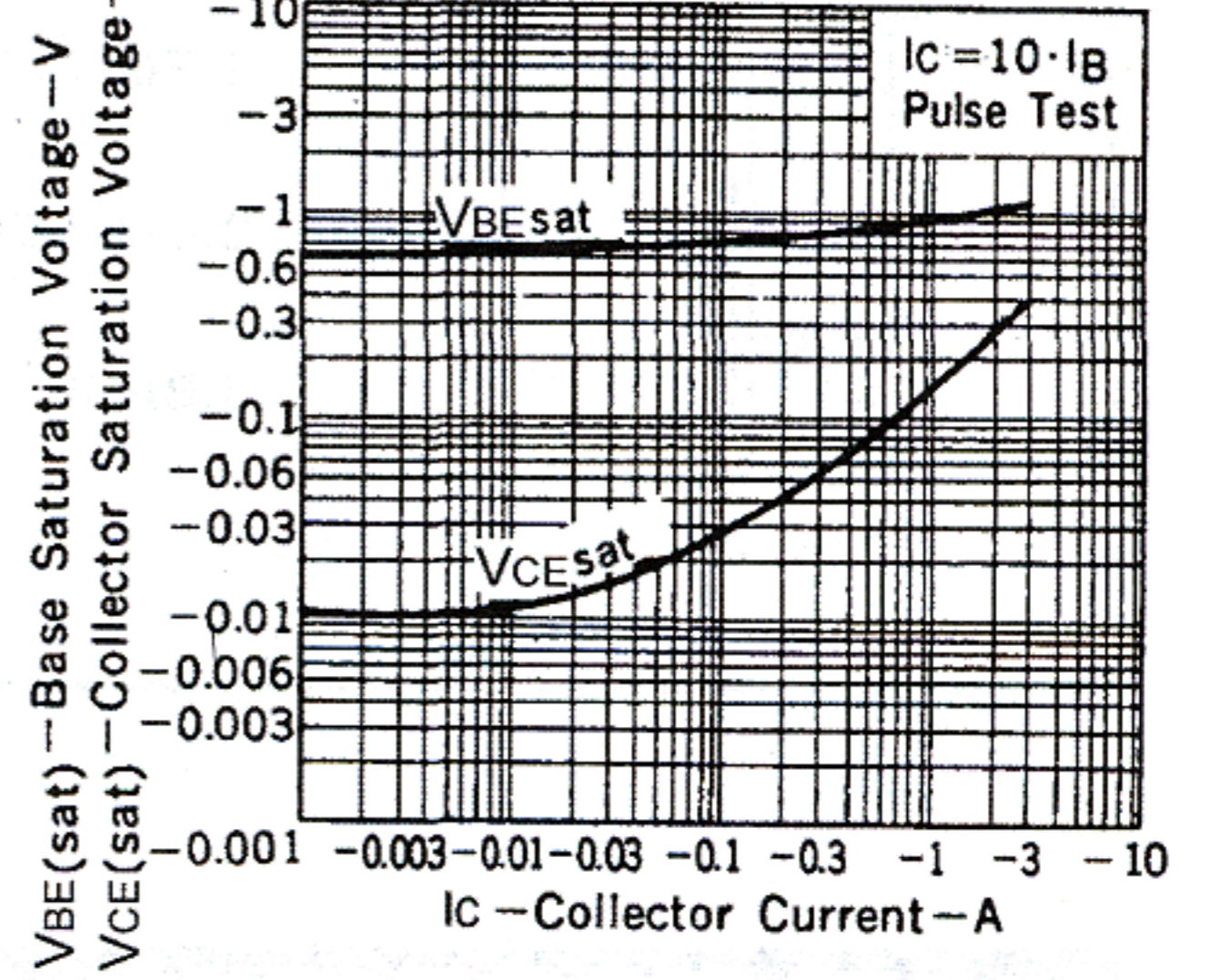
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



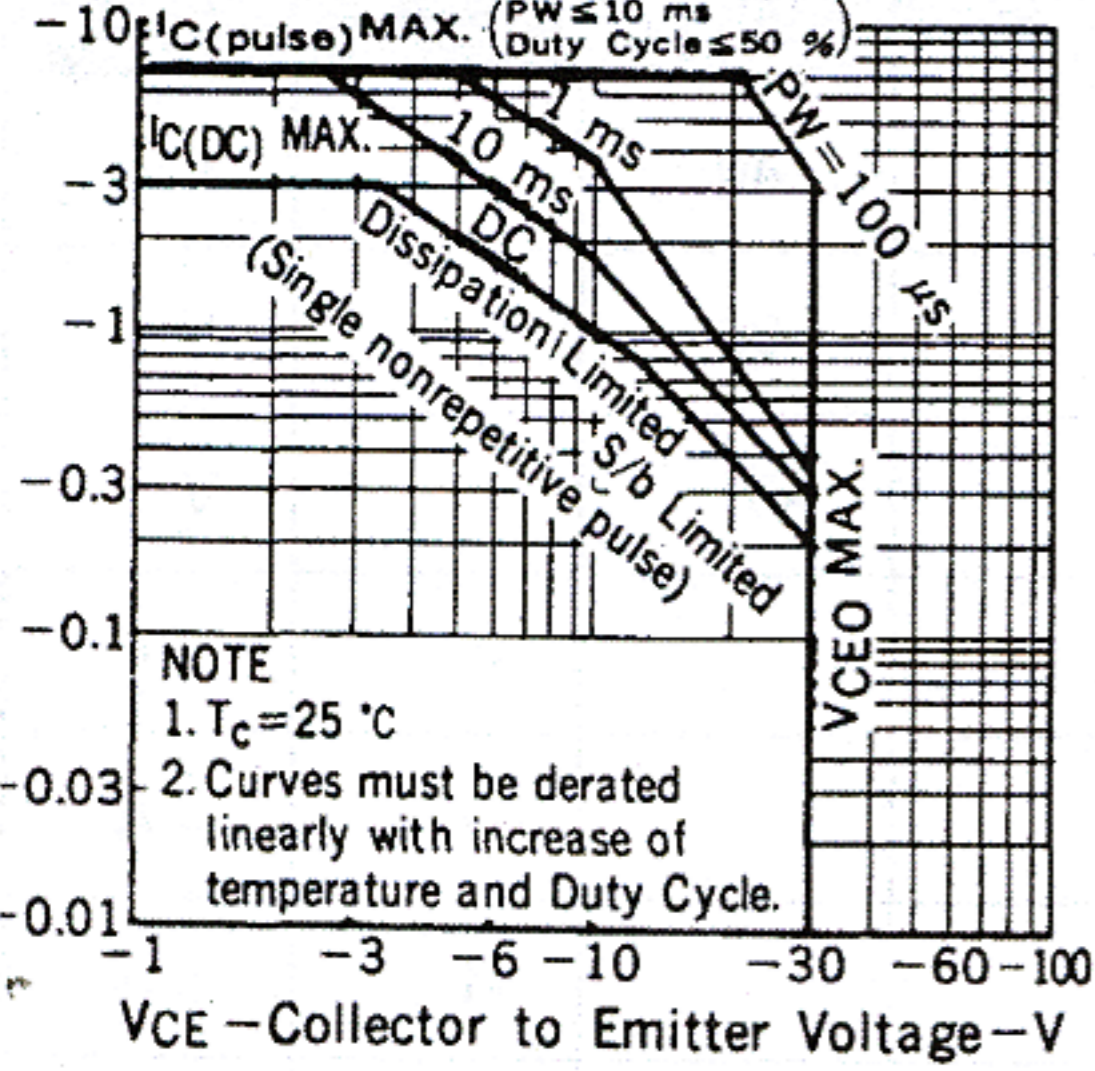
DERATING CURVES FOR ALL TYPES



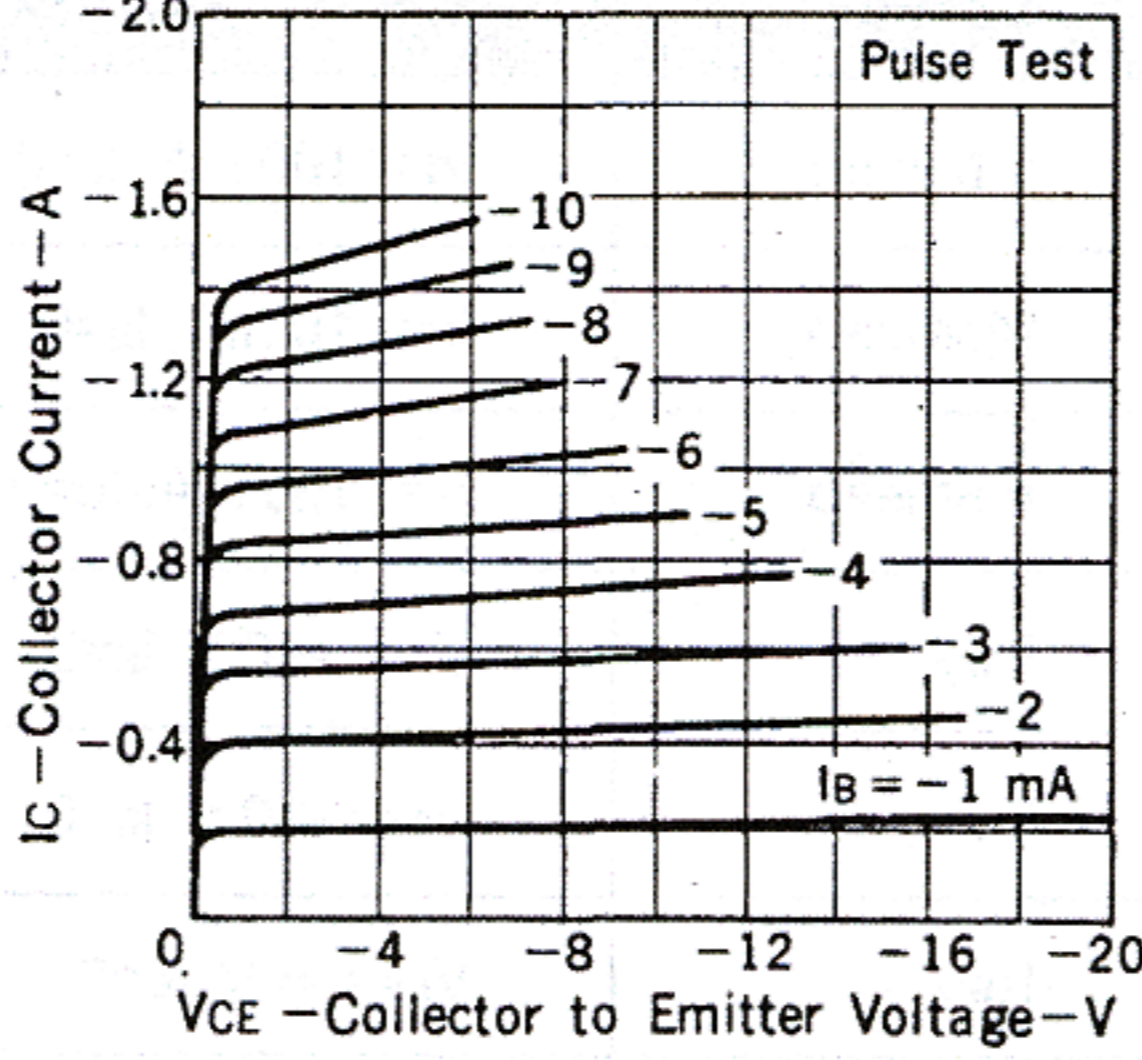
BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



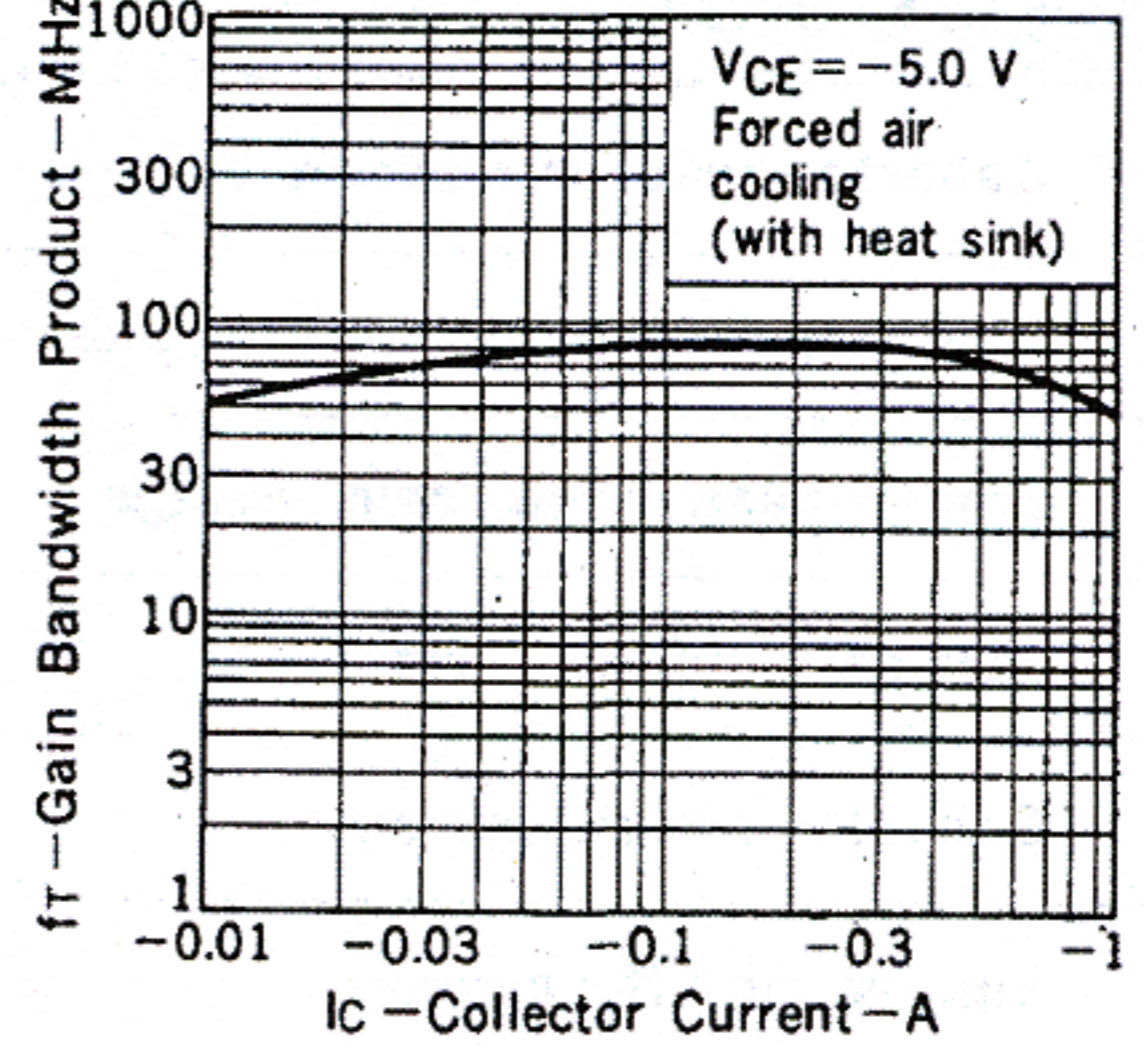
SAFE OPERATING AREAS



COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INPUT AND OUTPUT CAPACITANCE REVERSE VOLTAGE

