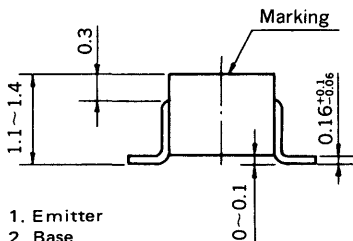
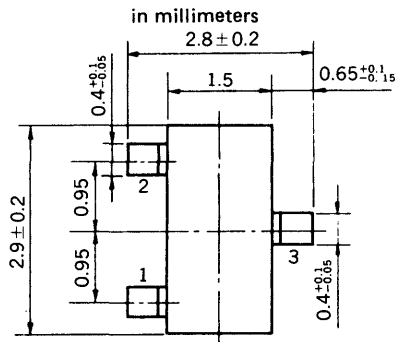


**HIGH VOLTAGE AMPLIFIER AND SWITCHING**  
**PNP SILICON EPITAXIAL TRANSISTOR**  
**MINI MOLD**

**PACKAGE DIMENSIONS**



1. Emitter
2. Base
3. Collector

**FEATURES**

- High Voltage:  $V_{CE0} = -200$  V
- High DC Current Gain:  $h_{FE} = 90$  to 450
- Complementary to 2SC3360

**ABSOLUTE MAXIMUM RATINGS**

Maximum Voltages and Current ( $T_a = 25^\circ\text{C}$ )

Collector to Base Voltage	$V_{CBO}$	-200	V
Collector to Emitter Voltage	$V_{CEO}$	-200	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current (DC)	$I_C$	-100	mA

Maximum Power Dissipation

Total Power Dissipation at $25^\circ\text{C}$ Ambient Temperature	$P_T$	200	mW
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Maximum Temperatures

Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	$I_{CBO}$			-100	nA	$V_{CB} = -200$ V, $I_E = 0$
Emitter Cutoff Current	$I_{EBO}$			-100	nA	$V_{EB} = -5$ V, $I_C = 0$
DC Current Gain	$h_{FE1}$	90	200	450		$V_{CE} = -10$ V, $I_C = -10$ mA
DC Current Gain	$h_{FE2}$	50	195			$V_{CE} = -10$ V, $I_C = -50$ mA
Base to Emitter Voltage	$V_{BE}$	-0.6	-0.65	-0.7	V	$V_{CE} = -10$ V, $I_C = -10$ mA
Collector Saturation Voltage	$V_{CE(sat)}$		-0.21	-0.3	V	$I_C = -50$ mA, $I_B = -5.0$ mA
Base Saturation Voltage	$V_{BE(sat)}$		-0.8	-1.2	V	$I_C = -50$ mA, $I_B = -5.0$ mA
Gain Bandwidth Product	$f_T$		120		MHz	$V_{CE} = -10$ V, $I_E = 10$ mA
Output Capacitance	$C_{ob}$		3.6		pF	$V_{CB} = -30$ V, $I_E = 0$ , $f = 1.0$ MHz
Turn-on Time	$t_{on}$		0.16		$\mu\text{s}$	$V_{CC} = -10$ V, $V_{BE(off)} = 2.5$ V
Storage Time	$t_{stg}$		1.3		$\mu\text{s}$	$I_C = -10$ mA
Turn-off Time	$t_{off}$		0.18		$\mu\text{s}$	$I_{B1} = -I_{B2} = -1.0$ mA

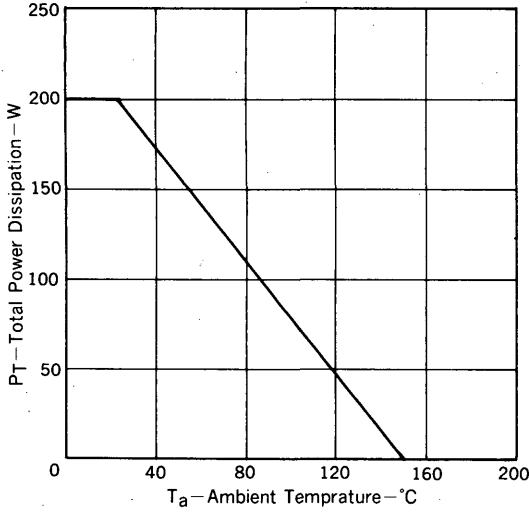
\* Pulsed:  $PW \leq 350 \mu\text{s}$ , Duty Cycle  $\leq 2\%$

**$h_{FE}$  Classification**

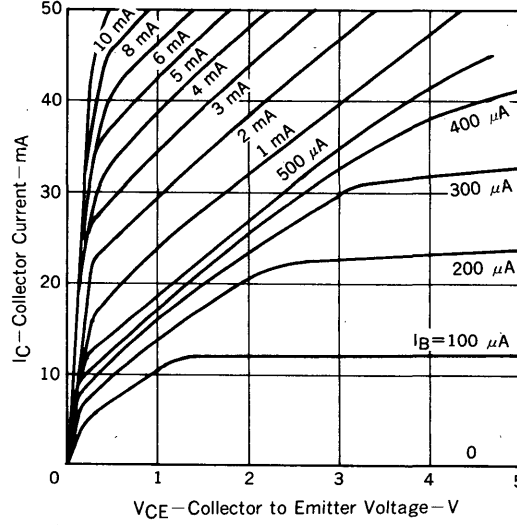
Marking	O5	O6	O7
$h_{FE1}$	90 to 180	135 to 270	200 to 450

TYPICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

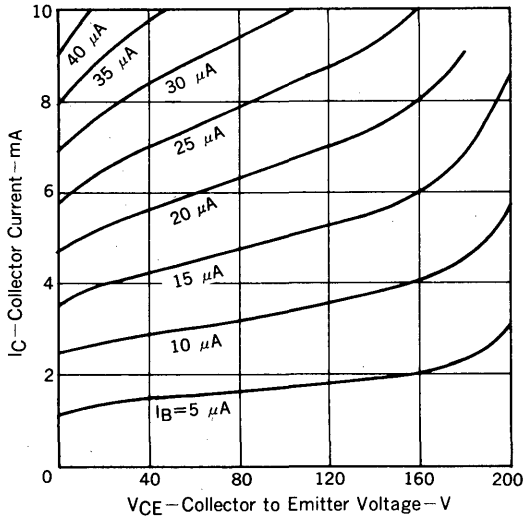
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



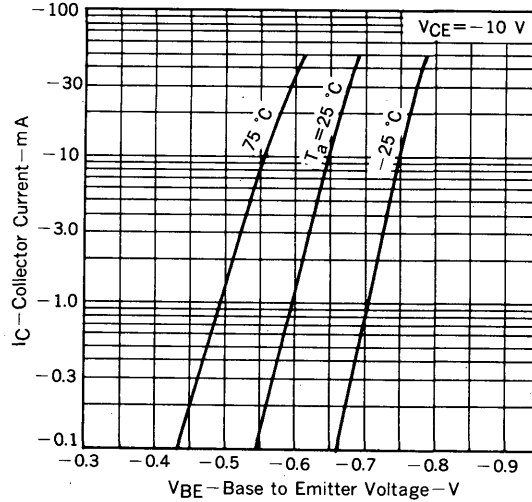
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



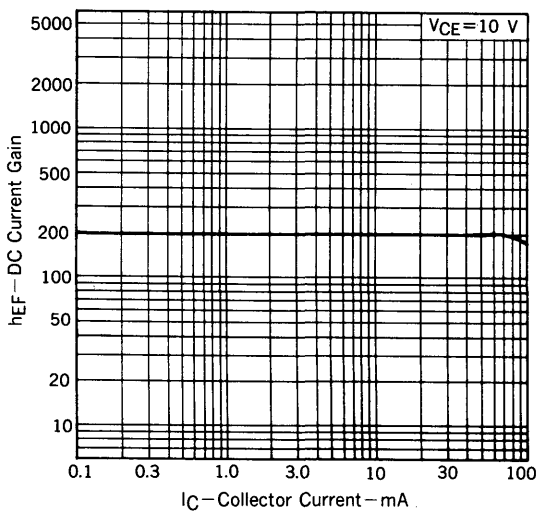
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



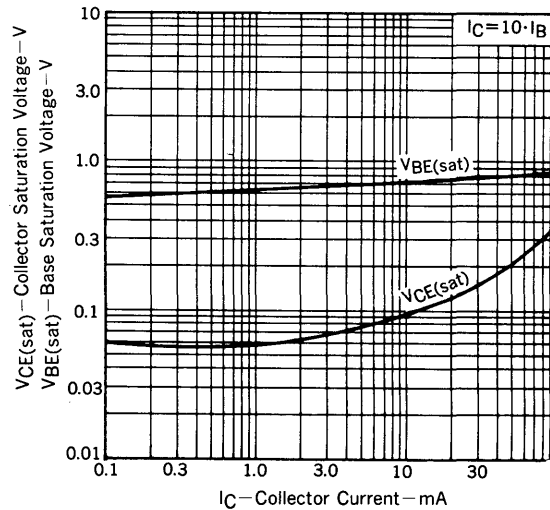
COLLECTOR CURRENT vs. BASE TO EMITTER VOLTAGE



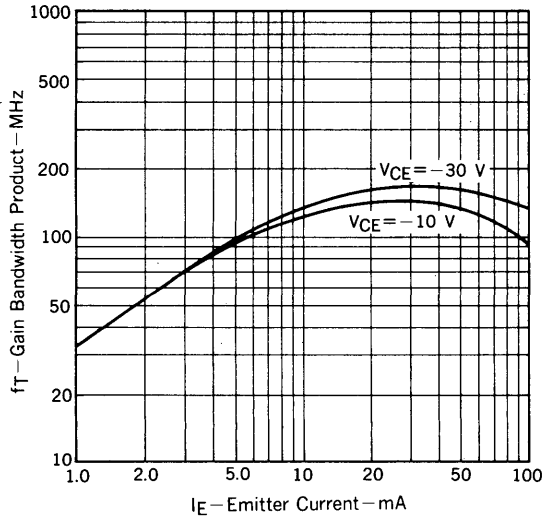
DC CURRENT GAIN vs. COLLECTOR CURRENT



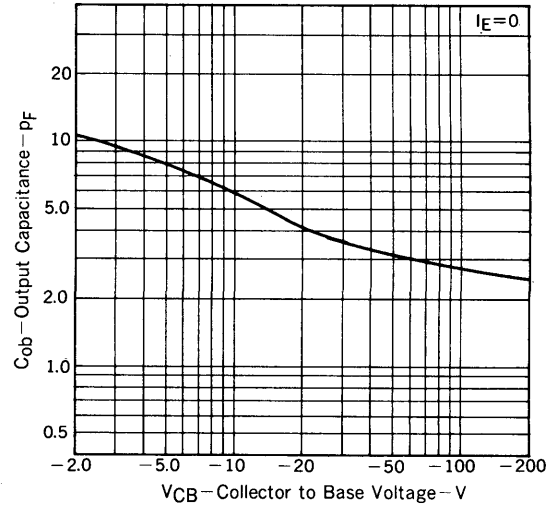
BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



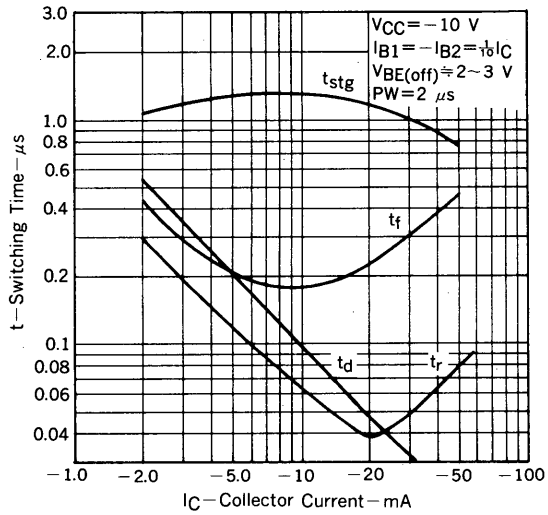
GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



SWITCHING TIME vs. COLLECTOR CURRENT



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