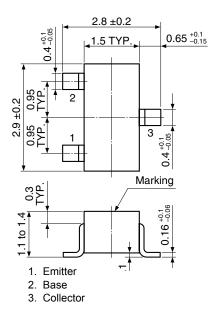


# PNP SILICON EPITAXIAL TRANSISTOR MINI MOLD

### \* PACKAGE DRAWING (Unit: mm)

NEC



## FEATURES

- Complementary to 2SC1623
- High DC Current Gain:  $h_{FE}$  = 200 TYP. (Vce = -6.0 V, Ic = -1.0 mA) )
- High Voltage: VCEO = -50 V

## QUALITY GRADE

#### Standard

Please refer to "Quality Grades on NEC Semiconductor Devices" (Document No. C11531E) published by NEC Electronics Corporation to know the specification of quality grade on the devices and its recommended applications.

## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^{\circ}C$ )

Collector to Base Voltage	Vсво	-60	V
Collector to Emitter Voltage	VCEO	-50	V
Emitter to Base Voltage	Vево	-5.0	V
Collector Current (DC)	lc	-100	mA
Total Power Dissipation	Ρт	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	–55 to +150	°C

## ELECTRICAL CHARACTERISTICS (TA = 25°C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	Ісво			-0.1	μA	V <sub>CB</sub> = -60 V, I <sub>E</sub> = 0 A
Emitter Cutoff Current	Іево			-0.1	μA	$V_{EB} = -5.0 \text{ V}, \text{ Ic} = 0 \text{ A}$
DC Current Gain	hfe	90	200	600		$V_{CE}$ = -6.0 V, Ic = -1.0 mA <sup>Note</sup>
Collector Saturation Voltage	VCE(sat)		-0.18	-0.3	V	Ic = –100 mA, Iв = –10 mA
Base to Emitter Voltage	VBE	-0.58	-0.62	-0.68	V	Vce = 6.0 V, Ic = -1.0 mA
Gain Bandwidth Product	f⊤		180		MHz	$V_{CE}$ = -6.0 V, I <sub>E</sub> = 10 mA
Output Capacitance	Cob		4.5		pF	$V_{CE}$ = -10 V, I <sub>E</sub> = 0 A, f = 1.0 MHz

**Note** Pulsed: PW  $\leq$  350  $\mu$ s, Duty Cycle  $\leq$  2%

#### **hFE CLASSIFICATION**

Marking	M4	M5	M6	M7
hfe	90 to 180	135 to 270	200 to 400	300 to 600

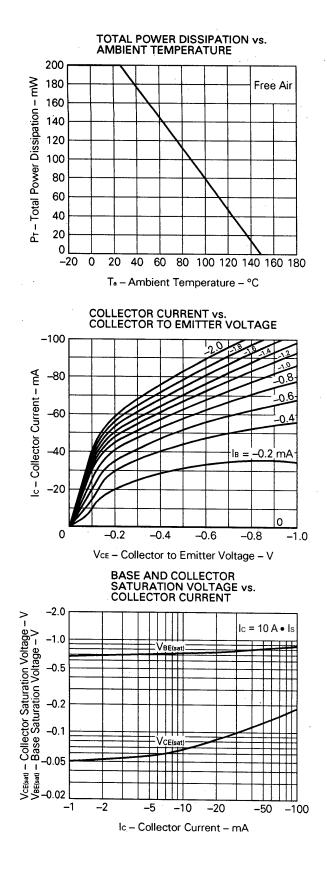
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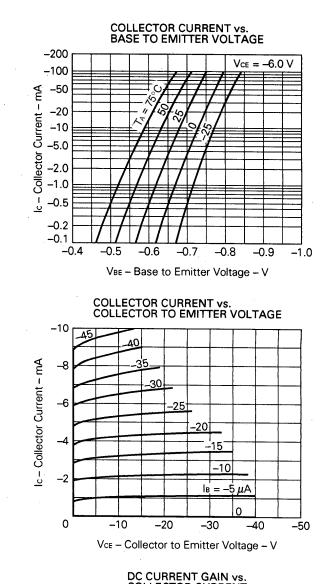
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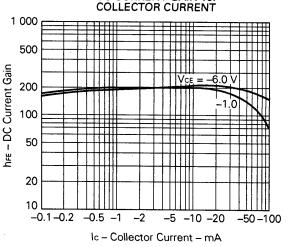
Document No. D17119EJ2V0DS00 (2nd edition) (Previous No. TC-1479B) Date Published March 2004 N CP(K) Printed in Japan

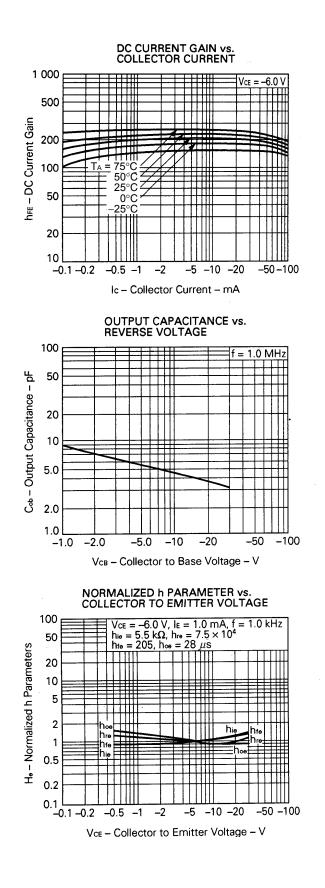
The mark  $\star$  shows major revised points.

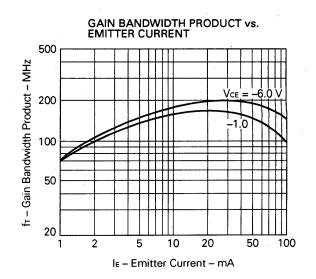
## TYPICAL CHARACTERISTICS ( $T_A = 25^{\circ}C$ )



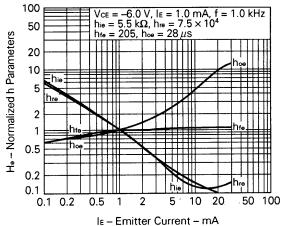








NORMALIZED h PARAMETER vs. EMITTER CURRENT



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