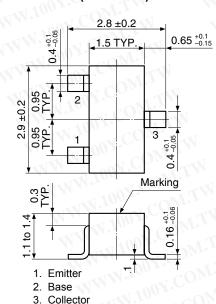


SILICON TRANSISTOR 2SA812

PNP SILICON EPITAXIAL TRANSISTOR MINI MOLD

★ PACKAGE DRAWING (Unit: mm)



FEATURES

- Complementary to 2SC1623
- High DC Current Gain: $h_{FE} = 200 \text{ TYP}$. ($V_{CE} = -6.0 \text{ V}$, $I_{C} = -1.0 \text{ mA}$)
- 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 (TA = 25°C)

Collector to Base Voltage	Vсво	-60	V
Collector to Emitter Voltage	VCEO	-50	V
Emitter to Base Voltage	VEBO	-5.0	V
Collector Current (DC)	lc lc	-100	mA
Total Power Dissipation	Рт	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	T.MO		-0.1	μΑ	V _{CB} = -60 V, I _E = 0 A
Emitter Cutoff Current	Ієво	Tire	N	-0.1	μΑ	V _{EB} = -5.0 V, I _C = 0 A
DC Current Gain	hfe	90	200	600	TOOY.	$V_{CE} = -6.0 \text{ V, Ic} = -1.0 \text{ mA}^{Note}$
Collector Saturation Voltage	V _{CE(sat)}	COM.	-0.18	-0.3	V	Ic = -100 mA, I _B = -10 mA
Base to Emitter Voltage	VBE	-0.58	-0.62	-0.68	V.V	Vce = 6.0 V, Ic = -1.0 mA
Gain Bandwidth Product	fτ	07.0	180	111	MHz	Vce = -6.0 V, I _E = 10 mA
Output Capacitance	Cob	out.Co.	4.5	W	pF	Vce = -10 V, IE = 0 A, f = 1.0 MHz

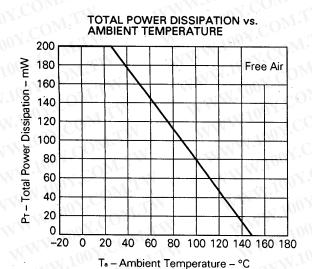
Note Pulsed: PW \leq 350 μ s, Duty Cycle \leq 2%

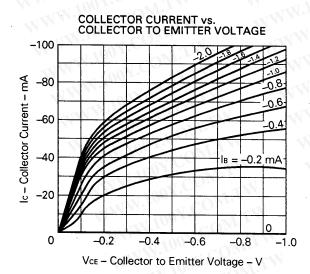
hfe CLASSIFICATION

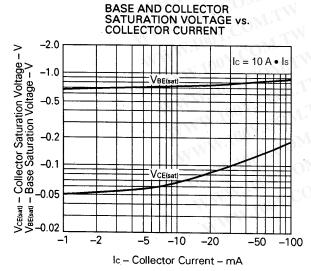
Marking	M4	M5	M6	M7
hfE	90 to 180	135 to 270	200 to 400	300 to 600

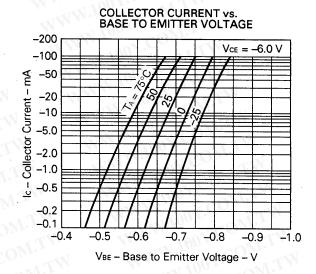
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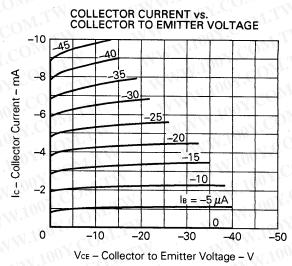
TYPICAL CHARACTERISTICS (TA = 25°C)

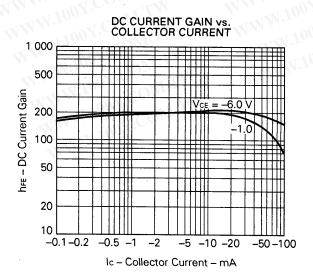


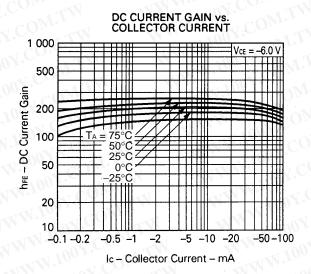


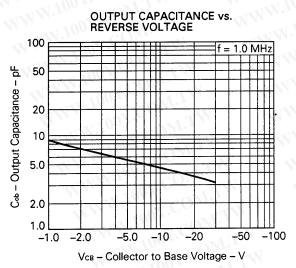


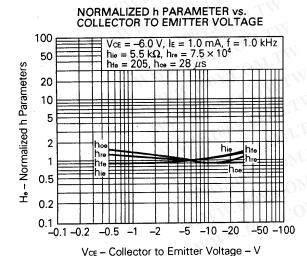


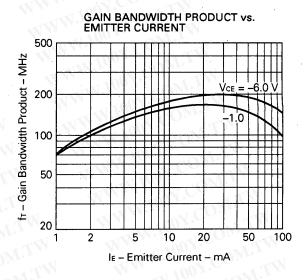


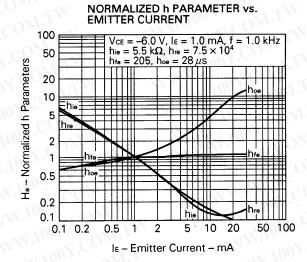












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- "Specific": Aircraft, aerospace equipment, submersible repeaters, nuclear reactor control systems, life support systems and medical equipment for life support, etc.

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