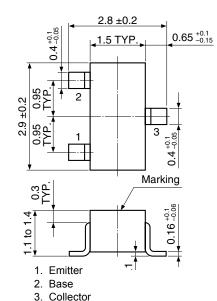


SILICON TRANSISTOR 2SA812

PNP SILICON EPITAXIAL TRANSISTOR MINI MOLD

* PACKAGE DRAWING (Unit: mm)



FEATURES

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

Collector to Base Voltage	Vсво	-60	V
Collector to Emitter Voltage	Vceo	-50	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current (DC)	lc	-100	mΑ
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			-0.1	μΑ	V _{CB} = -60 V, I _E = 0 A	
Emitter Cutoff Current	ІЕВО			-0.1	μΑ	V _{EB} = -5.0 V, I _C = 0 A	
DC Current Gain	hfe	90	200	600		$V_{CE} = -6.0 \text{ V, Ic} = -1.0 \text{ mA}^{Note}$	
Collector Saturation Voltage	V _{CE(sat)}		-0.18	-0.3	٧	Ic = -100 mA, Iв = -10 mA	
Base to Emitter Voltage	V _{BE}	-0.58	-0.62	-0.68	V	$V_{CE} = 6.0 \text{ V, Ic} = -1.0 \text{ mA}$	
Gain Bandwidth Product	f⊤		180		MHz	V _{CE} = -6.0 V, I _E = 10 mA	
Output Capacitance	Сов		4.5		pF	$V_{CE} = -10 \text{ V}, I_E = 0 \text{ A}, f = 1.0 \text{ MHz}$	

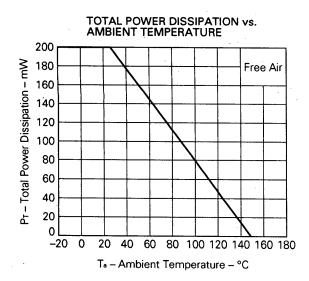
Note Pulsed: PW \leq 350 μ s, Duty Cycle \leq 2%

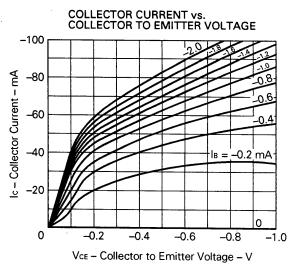
hfe CLASSIFICATION

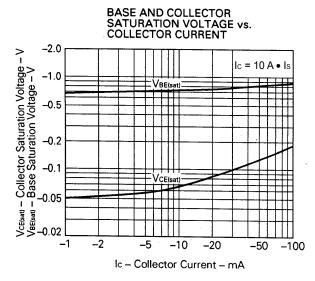
Γ	Marking	M4	M5	M6	M7
	hfe	90 to 180	135 to 270	200 to 400	300 to 600

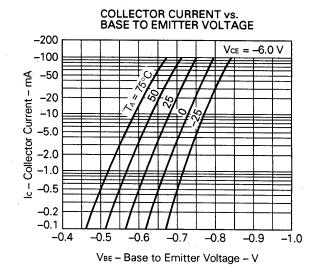
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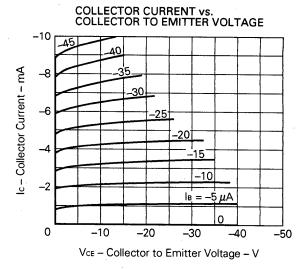
TYPICAL CHARACTERISTICS (TA = 25°C)

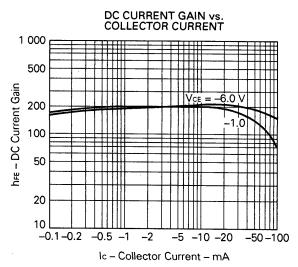


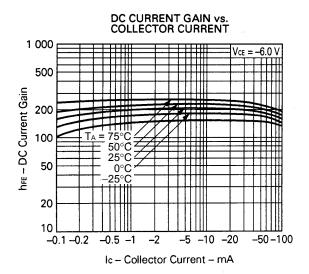


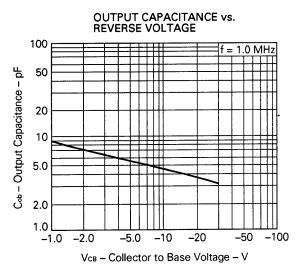


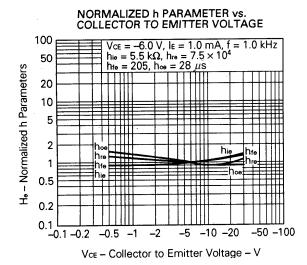


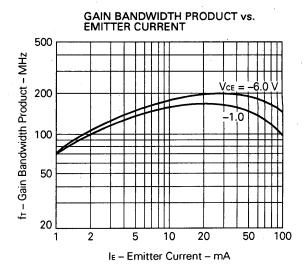


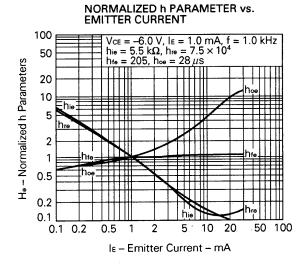












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