

To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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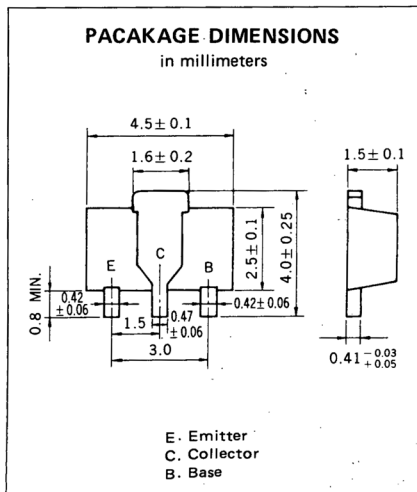
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NPN SILICON EPITAXIAL TRANSISTOR
POWER MINI MOLD

DESCRIPTION

2SC3554 is designed for high Voltage Switching application, especially in Hybrid Integrated Circuits.



FEATURES

- High Voltage : $V_{CE0} = 300$ V

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

Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current (DC)	$I_C(\text{DC})$	200	mA
Total Power Dissipation *	P_T	2.0	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

*When mounted on ceramic substrate of $16\text{ cm}^2 \times 0.7\text{ mm}$

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

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I_{CBO}			100	nA	$V_{CB} = 200\text{ V}, I_E = 0$
Emitter Cutoff Current	I_{EBO}			100	nA	$V_{EB} = 5.0\text{ V}, I_C = 0$
DC Current Gain	h_{FE}^{**}	60	150	250		$V_{CE} = 10\text{ V}, I_C = 10\text{ mA}$
Collector Saturation Voltage	$V_{CE(\text{sat})}^{**}$		0.15	1.5	V	$I_C = 50\text{ mA}, I_B = 5.0\text{ mA}$
Gain Bandwidth Product	f_T		50		MHz	$V_{CE} = 30\text{ V}, I_E = -10\text{ mA}$
Output Capacitance	C_{ob}		2.8	3.5	pF	$V_{CB} = 30\text{ V}, I_E = 0, f = 1.0\text{ MHz}$

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

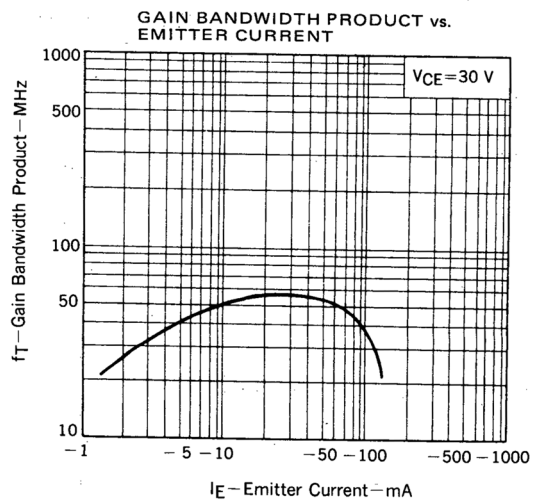
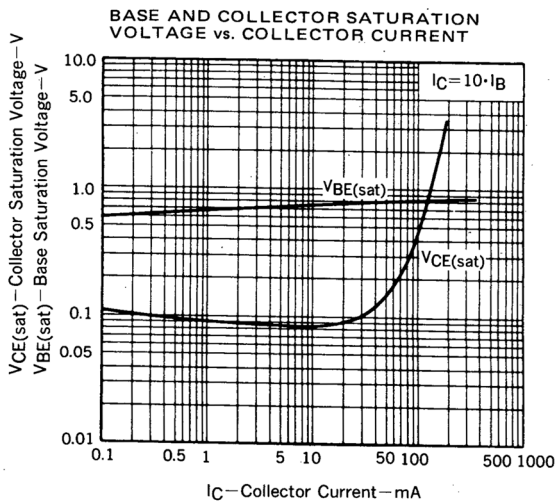
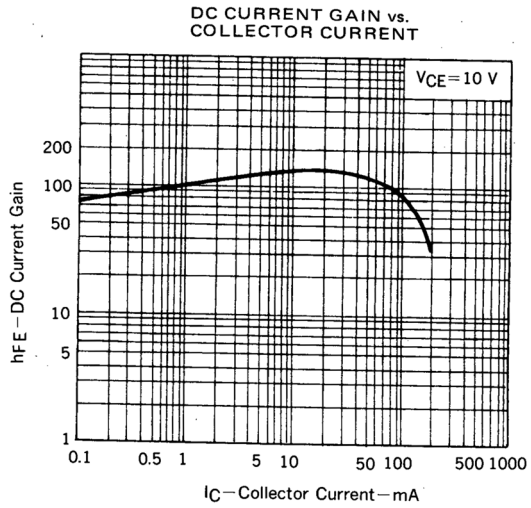
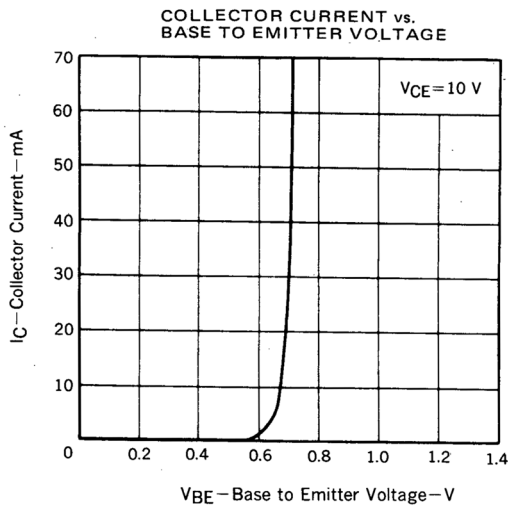
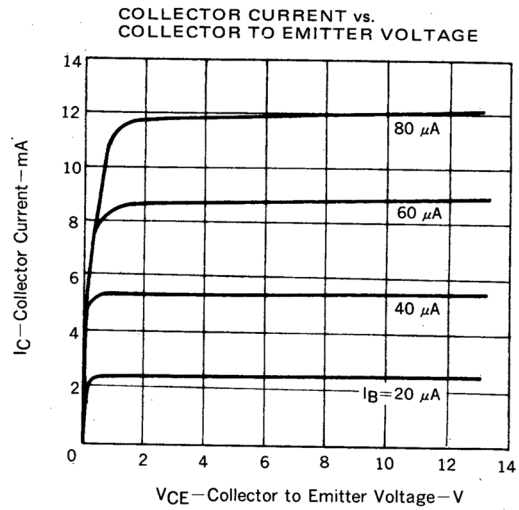
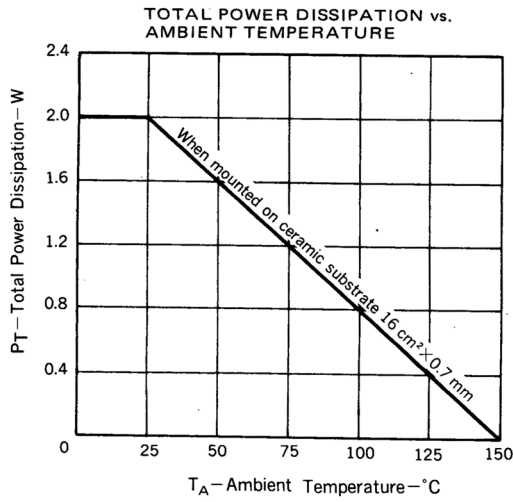
h_{FE} Classification

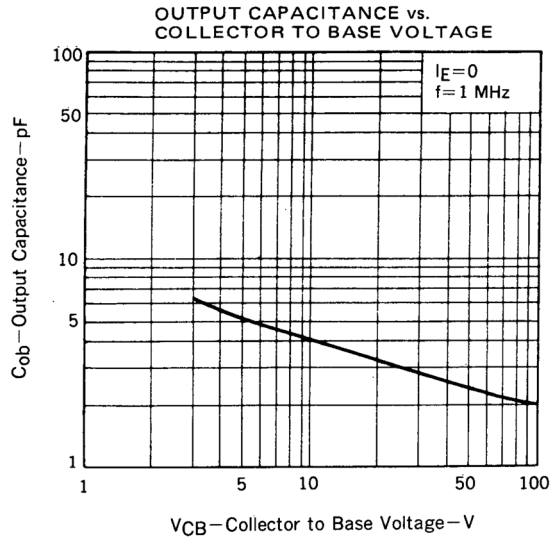
MARKING	SM	SL	SK
h_{FE}	60 to 120	100 to 200	160 to 250

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