



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
Dual Silicon Transistor**

VOLTAGE 20 Volts CURRENT 300 mAmpere

CHT1544RNGP

APPLICATION

- * Switching circuit, Inverter, Interface circuit, Driver circuit.

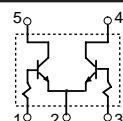
FEATURE

- * Small surface mounting type. (SC-74A)
- * High current gain.
- * Suitable for high packing density.
- * Low collector-emitter saturation.
- * High saturation current capability.
- * Both the NPN digital silicon transistor in one package.
- * Built in bias resistor($R_1=2.2\text{k}\Omega$, Typ.)

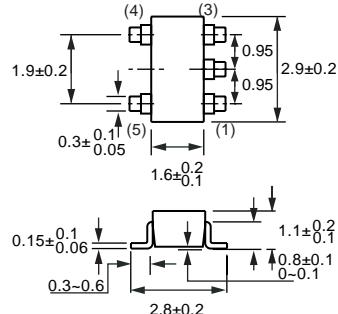
MARKING

- *HFE(A) : 44A
- *HFE(B) : 44B

CIRCUIT



SC-74A



Dimensions in millimeters

SC-74A

LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 60134).

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-Base voltage		50	V
V_{CEO}	Collector-Emitter voltage		20	V
V_{EBO}	Emitter-Base voltage		25	V
I_c	Collector current		300	mA
P_D	Collector Power dissipation	$T_{amb} \leq 25^\circ\text{C}$, Note 1	300	mW
T_{STG}	Storage temperature		-55 +150	$^\circ\text{C}$
T_J	Junction temperature		+150	$^\circ\text{C}$
$R_{\theta J-S}$	Thermal resistance , Note 1	junction - soldering point	350	$^\circ\text{C}/\text{W}$

Note

1. Total rating

RATING CHARACTERISTIC (CHT1544RNGP)

CHARACTERISTICS

$T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
I_{CBO}	Collector cutoff current	$V_{CB}=50\text{V}$	—	—	0.1	μA
I_{EBO}	Emitter cutoff current	$V_{EB}=25\text{V}$	—	—	0.1	μA
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C/I_B=10\text{mA}/1\text{mA}$	—	—	0.1	V
h_{FE}	DC current gain	$I_C=4\text{mA}; V_{CE}=2.0\text{V}$	200	—	1200	
R_1	Input resistor		1.54	2.2	2.86	$\text{k}\Omega$
f_T	Transition frequency	$I_C=4\text{mA}, V_{CE}=6.0\text{V}$	—	30	—	MHz

Note

1.hFE Classification A: 200 to 700, B: 350 to 1200

RATING CHARACTERISTIC CURVES (CHT1544RNGP)

Typical Electrical Characteristics

Fig.1 DC current gain vs. collector current

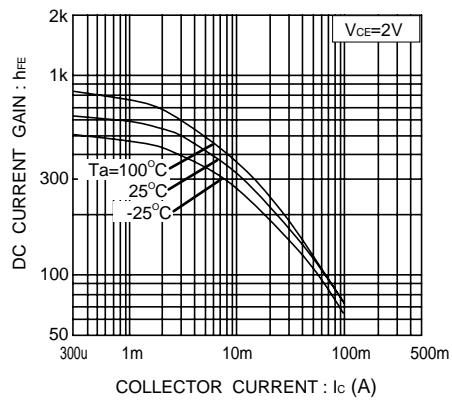


Fig.2 Collector-emitter saturation voltage vs. collector current

