



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT  
Dual Digital Silicon Transistor**

**VOLTAGE 30 Volts CURRENT 600 mAmpere**

*Lead free devices*

**CHIMH60PT**

**APPLICATION**

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

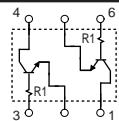
**FEATURE**

- \* Small surface mounting type. (SC-74/SOT-457)
- \* High current gain.
- \* Suitable for high packing density.
- \* Low collector-emitter saturation.
- \* High saturation current capability.
- \* Two CHDTC323T chips in one package.
- \* Built in bias resistor( $R_1=2.2\text{k}\Omega$ , Typ.)

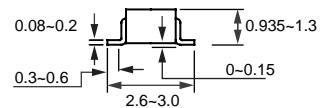
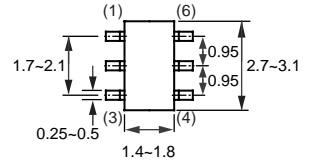
**MARKING**

- \* I60

**CIRCUIT**



**SC-74/SOT-457**



Dimensions in millimeters

**SC-74/SOT-457**

**LIMITING VALUES**

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-Base voltage		30	V
$V_{CEO}$	Collector-Emitter voltage		15	V
$V_{EBO}$	Emitter-Base voltage		5	V
$I_C(\text{Max.})$	Collector current		600	mA
$P_D$	Power dissipation	$T_{\text{amb}} \leq 25^\circ\text{C}$ , Note 1	200	mW
$T_{\text{STG}}$	Storage temperature		-55 +150	°C
$T_J$	Junction temperature		-55 +150	°C
$R_{\theta J-S}$	Thermal resistance , Note 1	junction - soldering point	140	°C/W

**Note**

- Transistor mounted on an FR4 printed-circuit board.

## RATING CHARACTERISTIC ( CHIMH60PT )

### CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
BVCBO	Collector-base breakdown voltage	$I_c=50\mu\text{A}$	30	—	—	V
BVCEO	Collector-emitter breakdown voltage	$I_c=1.0\text{mA}$	15	—	—	V
BVEBO	Emitter-base breakdown voltage	$I_E=50\mu\text{A}$	5.0	—	—	V
I <sub>CBO</sub>	Collector cutoff current	$V_{CB}=20\text{V}$	—	—	0.5	$\mu\text{A}$
I <sub>EBO</sub>	Emitter cutoff current	$V_{EB}=4\text{V}$	—	—	0.5	$\mu\text{A}$
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	$I_c/I_b=50\text{mA}/2.5\text{mA}$	—	0.04	0.08	V
h <sub>FE</sub>	DC current gain	$I_c=50\text{mA}; V_{CE}=5.0\text{V}$	100	250	600	
R <sub>1</sub>	Input resistor		1.64	2.2	2.86	$\text{k}\Omega$
f <sub>T</sub>	Transition frequency	$I_E=-50\text{mA}, V_{CE}=10.0\text{V}$ $f=100\text{MHz}$	—	200	—	MHz

### Note

1. Pulse test:  $t_p \leq 300\mu\text{s}$ ;  $\delta \leq 0.02$ .

## RATING CHARACTERISTIC CURVES ( CHIMH60PT )

### Typical Electrical Characteristics

Fig.1 DC current gain vs. collector current

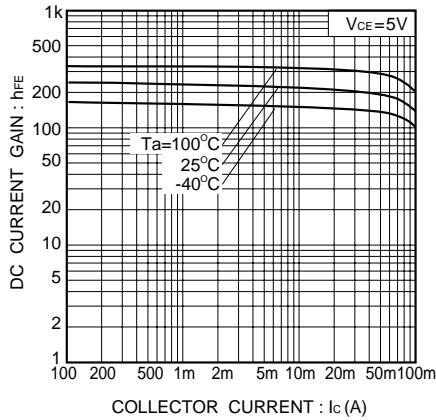


Fig.2 Collector-emitter voltage vs. collector current

