



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
NPN Epitaxial Transistor**

VOLTAGE 15 Volts CURRENT 6 Amperes

CHT5564XGP

APPLICATION

* DC to DC relay drivers, lamp drivers

FEATURE

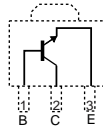
- * Small flat package. (SC-62/SOT-89)
- * Low saturation voltage $V_{CE(sat)}=0.18V(I_C/I_B=1.5A/0.03A)$
- * $PC= 1.3W$ (mounted on ceramic substrate).
- * High saturation current capability.

CONSTRUCTION

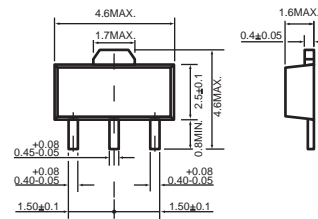
* NPN Silicon Transistor

MARKING

CIRCUIT



SC-62/SOT-89



- 1 Base
- 2 Collector (Heat Sink)
- 3 Emitter

Dimensions in millimeters

SC-62/SOT-89

MAXIMUM RATINGS (At $T_A = 25^{\circ}C$ unless otherwise noted)

RATINGS	CONDITION	SYMBOL	MIN.	MAX.	UNITS
Collector - Base Voltage	Open Emitter	V_{CBO}	-	20	Volts
Collector - Emitter Voltage	Open Base	V_{CEO}	-	15	Volts
Emitter - Base Voltage	Open Collector	V_{EBO}	-	5	Volts
Collector Current DC		I_C	-	6	Amps
Peak Collector Current		I_{CM}	-	9	Amps
Peak Base Current		I_{BM}	-	0.6	Amps
Total Power Dissipation	$T_A \leq 25^{\circ}C$; Note 1	P_{TOT}	-	1.3	W
Storage Temperature		T_{STG}	-55	+150	$^{\circ}C$
Junction Temperature		T_J	-	+150	$^{\circ}C$
Operating Ambient Temperature		T_{AMB}	-55	+150	$^{\circ}C$

Note

1. Transistor mounted on ceramic substrate by 40mmX40mmX0.7mm.
2. Measured at Pulse Width 300 us, Duty Cycle 2%.

2006-02

RATING CHARACTERISTIC CURVES (CHT5564XGP)

CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETERS	CONDITION	SYMBOL	MIN.	TYPE	MAX.	UNITS
Collector Cut-off Current	$I_E=0; V_{CB}=12\text{V}$	I_{CBO}	-	-	0.1	μA
Emitter Cut-off Current	$I_C=0; V_{EB}=4\text{V}$	I_{CEO}	-	-	0.1	μA
DC Current Gain	$V_{CE}=0.5\text{V}$; Note 1 $I_C=5\text{A}$	h_{FE}	250	-	-	
Collector-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.03\text{A}$	V_{CEsat}	-	0.12	0.18	Volts
Base-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.03\text{A}$	V_{BEsat}	-	0.85	1.2	Volts
Output Capacitance	$I_E=I_C=0; V_{CB}=10\text{V}$; $f=1\text{MHz}$	C_C	-	23	-	pF
Transition Frequency	$I_C=0.5\text{A}; V_{CE}=2.0\text{V}$; $f=100\text{MHz}$	f_T	-	380	-	MHz

Note :

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