



CHENMKO ENTERPRISE CO.,LTD

SMALL FLAT NPN Epitaxial Transistor

VOLTAGE 25 Volts CURRENT 5 Ampere

CHT200PPT

Lead free devices

FEATURE

- * Small flat package. (DPAK)
- * Low saturation voltage $V_{CE(sat)}=0.3V(max.)(I_c=500mA)$
- * High saturation current capability.

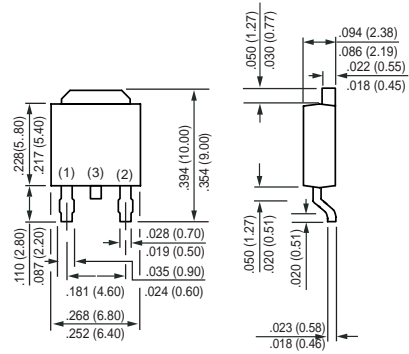
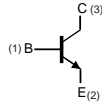
CONSTRUCTION

- * NPN Switching Transistor



DPAK

CIRCUIT



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

DPAK

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

RATINGS	CONDITION	SYMBOL	MIN.	MAX.	UNITS
Collector - Base Voltage	Open Emitter	V_{CB0}	-	40	Volts
Collector - Emitter Voltage	Open Base	V_{CE0}	-	25	Volts
Emitter - Base Voltage	Open Collector	V_{EB0}	-	8	Volts
Collector Current DC		I_c	-	5	Amps
Peak Collector Current		I_{CM}	-	10	Amps
Peak Base Current		I_{BM}	-	1.0	Amps
Total Power Dissipation	$T_A \leq 25^{\circ}C$	P_{TOT}	-	1400	mW
Storage Temperature		T_{STG}	-55	+150	$^{\circ}C$
Junction Temperature		T_J	-	+150	$^{\circ}C$

RATING CHARACTERISTIC CURVES (CHT200PPT)

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

PARAMETERS	CONDITION	SYMBOL	MIN.	TYPE	MAX.	UNITS
Collector Cut-off Current	$I_E=0; V_{CB}=40\text{V}$	I_{CBO}	-	-	0.1	μA
Emitter Cut-off Current	$I_C=0; V_{EB}=8\text{V}$	I_{EBO}	-	-	0.1	μA
DC Current Gain	$V_{CE}=1\text{V}$; Note 1 $I_C=500\text{mA}$ $I_C=2.0\text{A}$ $I_C=5.0\text{A}; V_{CE}=2\text{V}$	h_{FE}	70 45 10	- - -	- 180 -	
Collector-Emitter Saturation Voltage	$I_C=500\text{mA}; I_B=50\text{mA}$ $I_C=2\text{A}; I_B=200\text{mA}$ $I_C=5\text{A}; I_B=1\text{A}$	V_{CEsat}	- - -	- - -	0.3 0.75 1.8	Volts
Base-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=1\text{A}$	V_{BEsat}	-	-	2.5	Volts
Collector Capacitance	$I_E=I_C=0; V_{CB}=10\text{V};$ $f=0.1\text{MHz}$	C_C	-	-	80	pF
Transition Frequency	$I_C=0.1\text{A}; V_{CE}=10\text{V};$ $f=10\text{MHz}$	f_T	65	-	-	MHz

Note :

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