

RELAY DRIVERS, LAMP DRIVERS,  
MOTOR DRIVERS, STROBES APPLICATION.

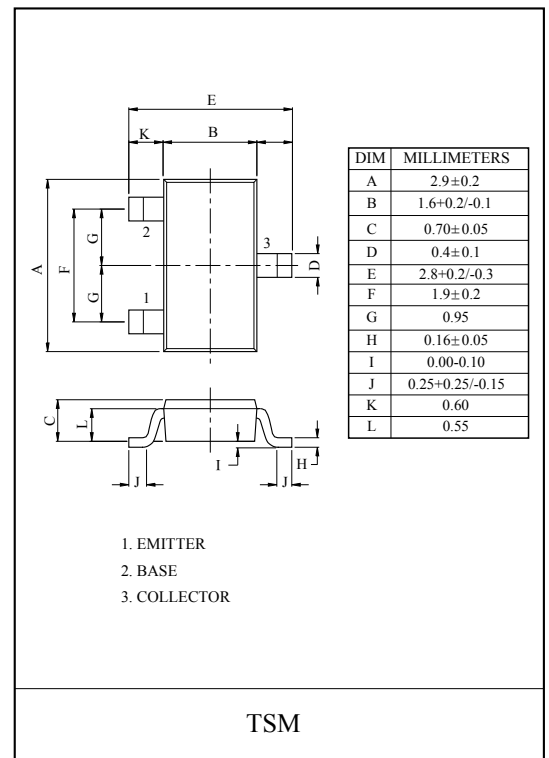
### FEATURES

- Adoption of MBIT Processes.
- High Current Capacitance.
- Low Collector-to-Emitter Saturation Voltage.
- High-Speed Switching.
- Ultrasmall-sized Package Permitting Applied sets to be made small and slim.
- High Allowable Power Dissipation.
- Complementary to KTA1543T.

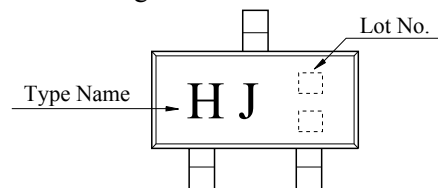
### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V <sub>CB0</sub>	40	V
Collector-Emitter Voltage		V <sub>CEO</sub>	30	V
Emitter-Base Voltage		V <sub>EBO</sub>	6	V
Collector Current	DC	I <sub>C</sub>	5	A
	Pulse	I <sub>CP</sub>	7	
Base Current		I <sub>B</sub>	1.2	A
Collector Power Dissipation		P <sub>C</sub> *	0.9	W
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

\* Package mounted on a ceramic board (600mm<sup>2</sup> × 0.8mm)



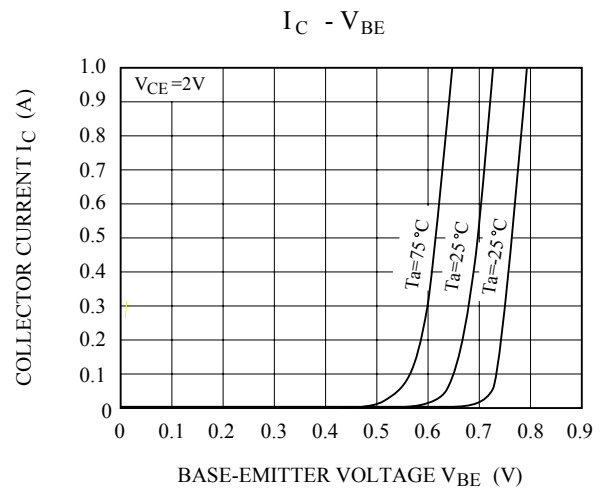
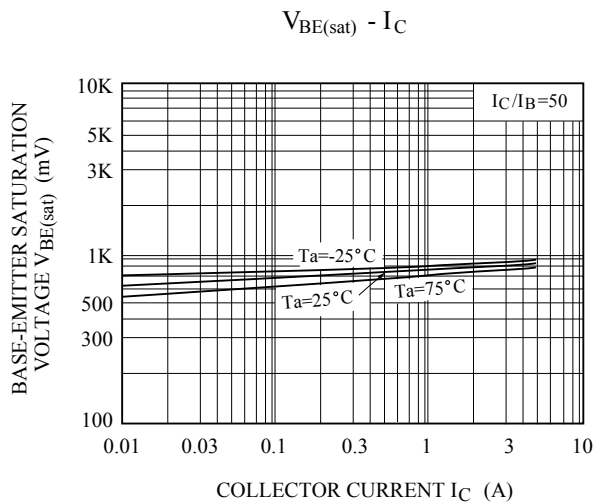
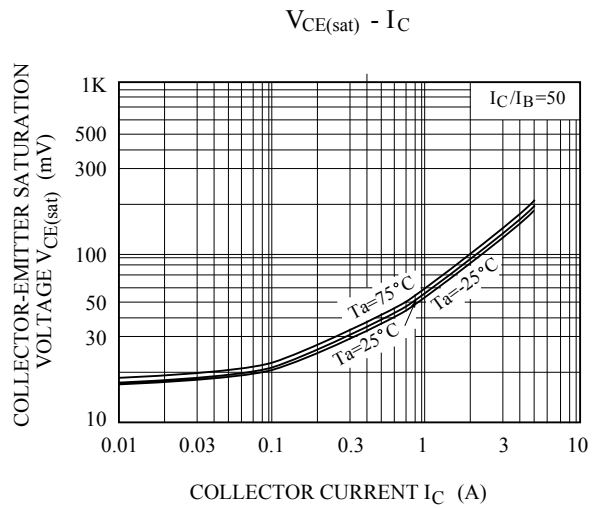
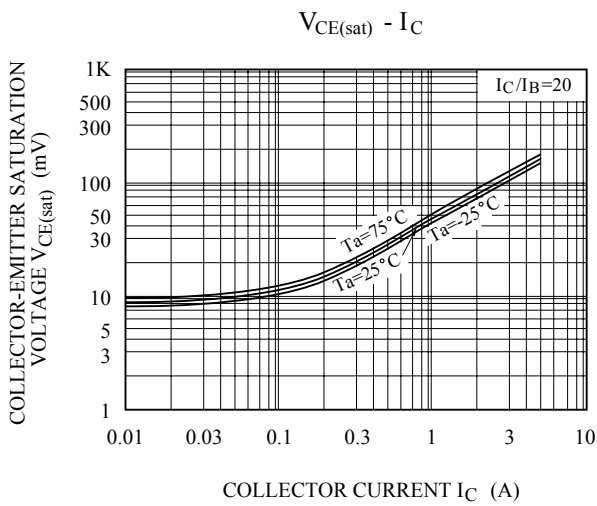
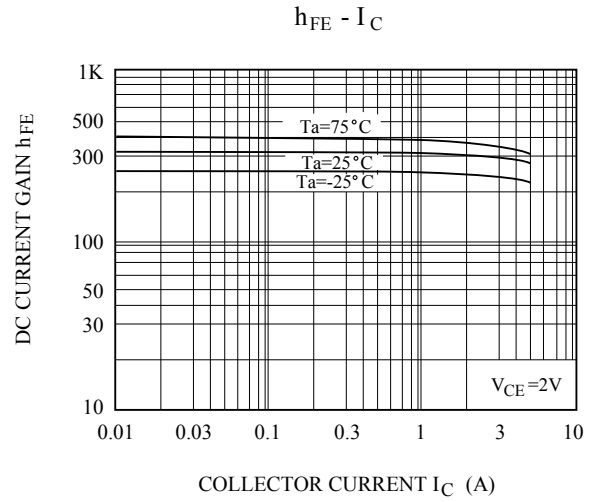
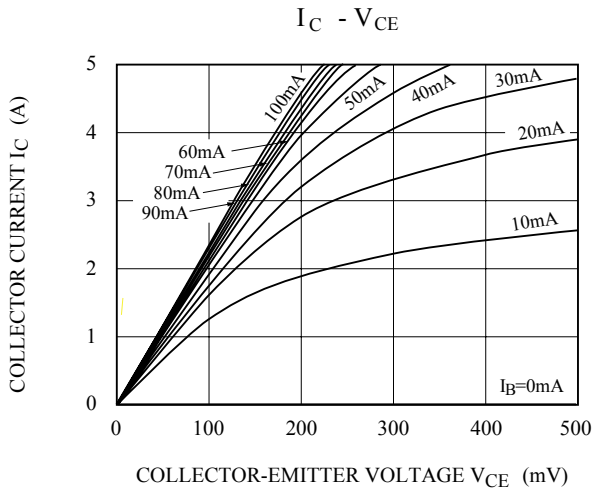
### Marking



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

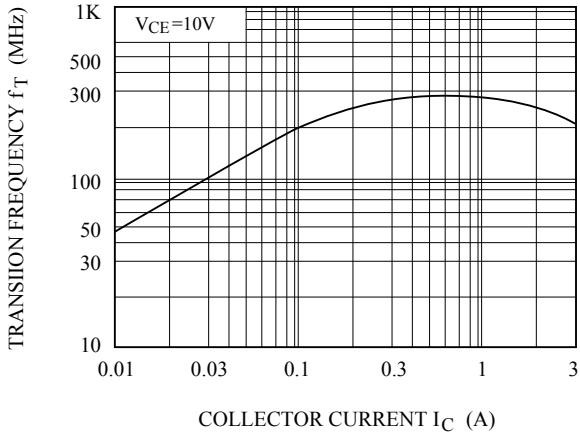
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I <sub>CB0</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0	-	-	0.1	μA
Emitter Cut-off Current		I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0	-	-	0.1	μA
Collector-Base Breakdown Voltage		V <sub>(BR)CB0</sub>	I <sub>C</sub> =10μA, I <sub>E</sub> =0	40	-	-	V
Collector-Emitter Breakdown Voltage		V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	30	-	-	V
Emitter-Base Breakdown Voltage		V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	6	-	-	V
Collector-Emitter Saturation Voltage		V <sub>CE(sat)</sub>	I <sub>C</sub> =2.5A, I <sub>B</sub> =50mA	-	110	165	mV
Base-Emitter Saturation Voltage		V <sub>BE(sat)</sub>	I <sub>C</sub> =2.5A, I <sub>B</sub> =50mA	-	0.82	1.2	V
DC Current Gain		h <sub>FE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =500mA	200	-	560	
Transition Frequency		f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA	-	290	-	MHz
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> =10V, f=1MHz	-	40	-	pF
Switching Time	Turn-On Time	t <sub>on</sub>		-	30	-	nS
	Storage Time	t <sub>stg</sub>		-	320	-	
	Fall Time	t <sub>f</sub>		-	14	-	

# KTC3543T

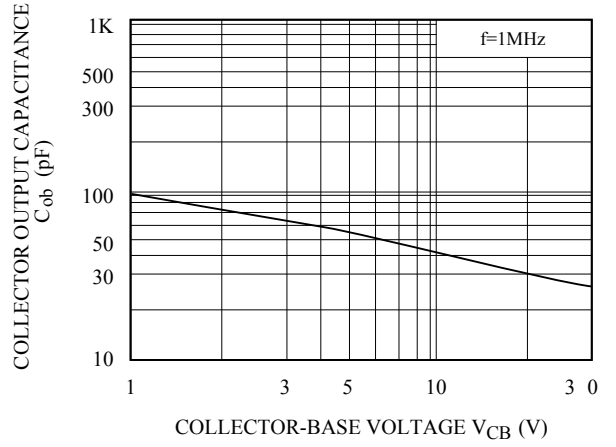


# KTC3543T

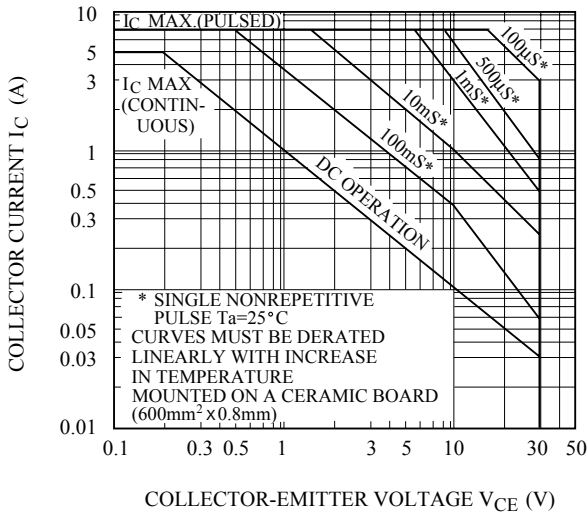
$f_T - I_C$



$C_{ob} - V_{CB}$



SAFE OPERATING AREA



$P_c - T_a$

