

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

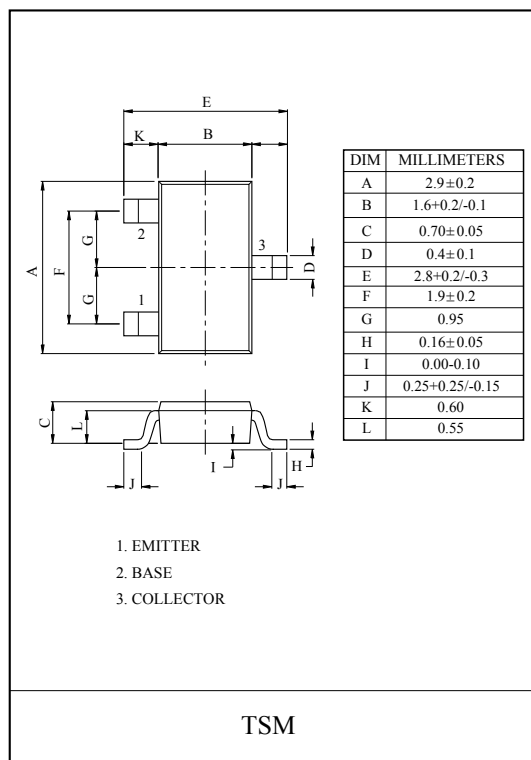
FEATURES

- 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 KTC3536T.

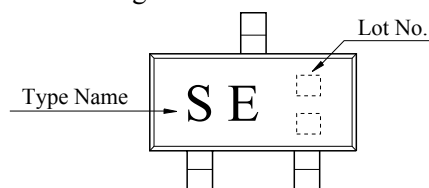
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CB0}	-20	V
Collector-Emitter Voltage		V_{CEO}	-20	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-5	A
	Pulse	I_{CP}	-8	
Base Current		I_B	1.2	A
Collector Power Dissipation		P_C^*	0.9	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

* Package mounted on a ceramic board (600mm² × 0.8mm)



Marking



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-12V, I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-4V, I_C=0$	-	-	-0.1	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-20	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-20	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-3A, I_B=-60mA$	-	-200	-300	mV
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-3A, I_B=-60mA$	-	-0.85	-1.2	V
DC Current Gain	h_{FE}	$V_{CE}=-2V, I_C=-500mA$	200	-	560	
Transition Frequency	f_T	$V_{CE}=-2V, I_C=-500mA$	-	140	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V, f=1MHz$	-	70	-	pF
Switching Time	Turn-On Time	t_{on}	-	30	-	nS
	Storage Time	t_{stg}	-	120	-	
	Fall Time	t_f	-	14	-	

INPUT →

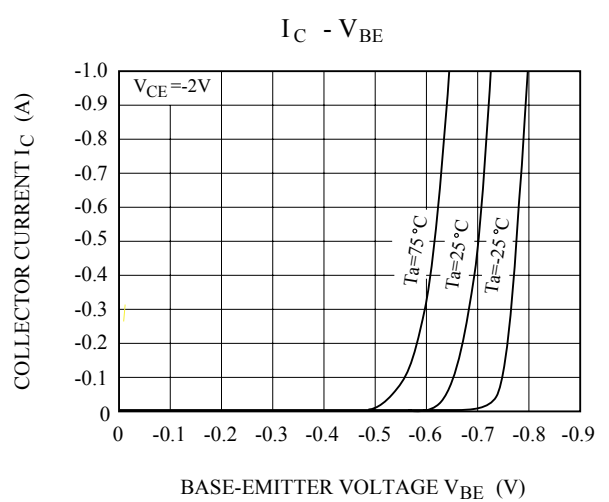
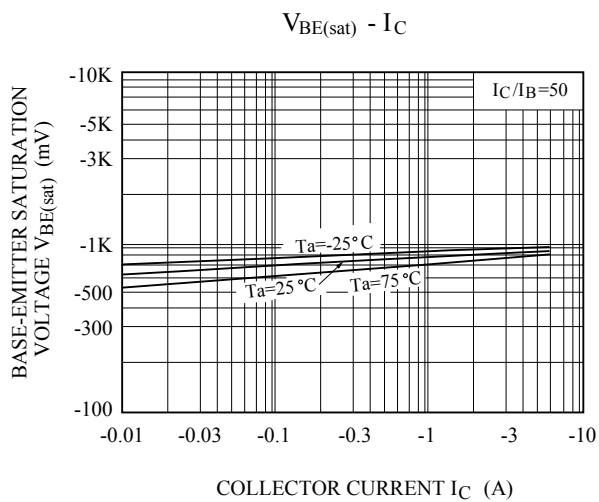
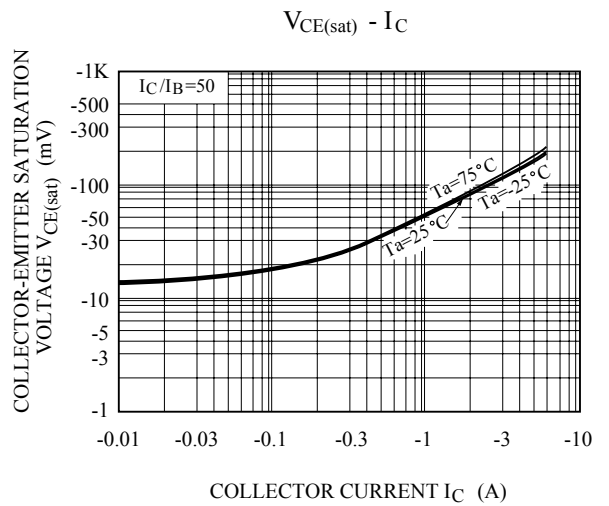
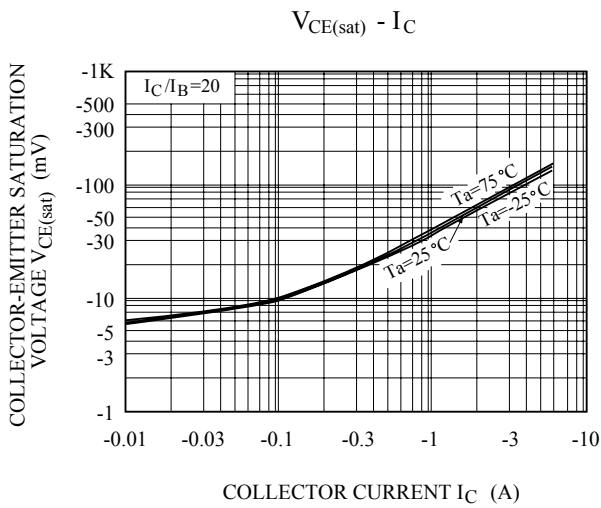
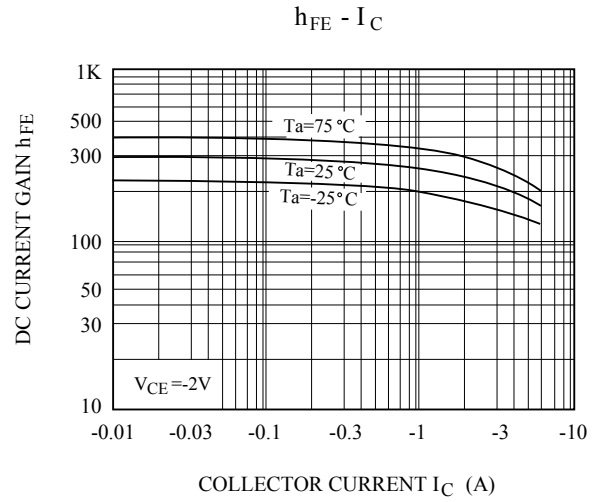
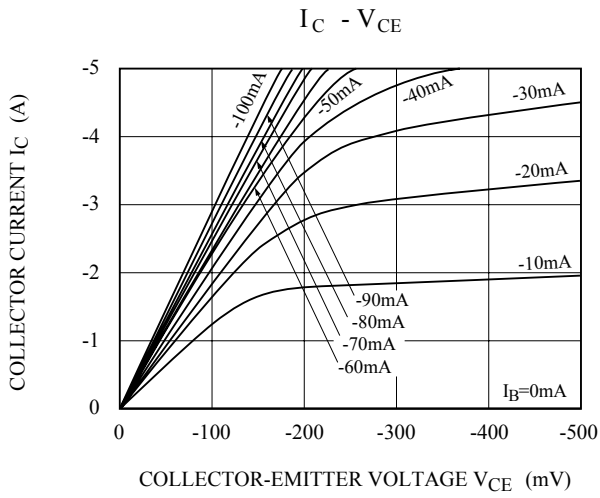
OUTPUT →

$V_{BE}=5V$

$V_{CC}=-5V$

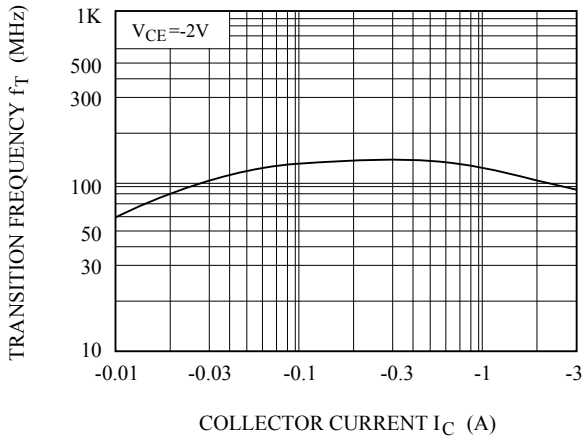
$-20I_{B1}=20I_{B2}=I_C=3A$

KTA1536T

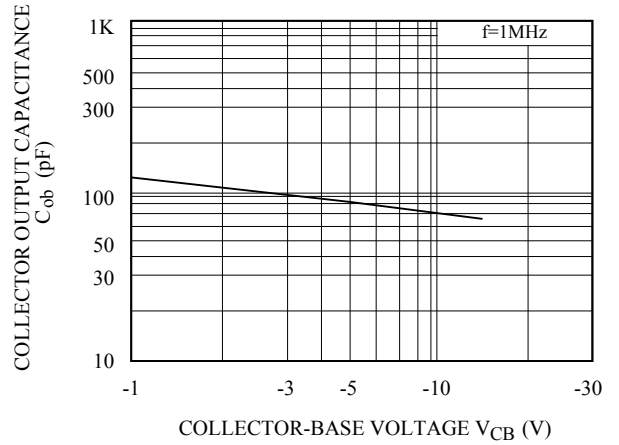


KTA1536T

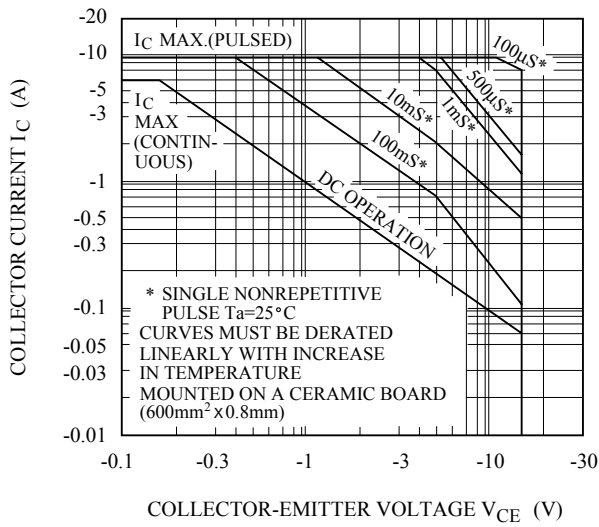
$f_T - I_C$



$C_{ob} - V_{CB}$



SAFE OPERATING AREA



$P_c - T_a$

