

DC-DC CONVERTERS RELAY DRIVERS, LAMP DRIVERS,  
MOTOR DRIVERS, STROBES APPLICATION.

### FEATURES

- Adoption of FBET, MBIT Processes.
- High Current Capacitance.
- Low Collector-to-Emitter Saturation Voltage.
- High-Speed Switching.
- Ultrasmall Package Facilitates Miniaturization in end Products.
- High Allowable Power Dissipation.
- Complementary to KTC3552T.
- Suffix U : Qualified to AEC-Q101.  
ex) KTA1552T-RTK/HU

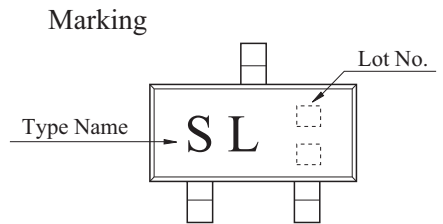
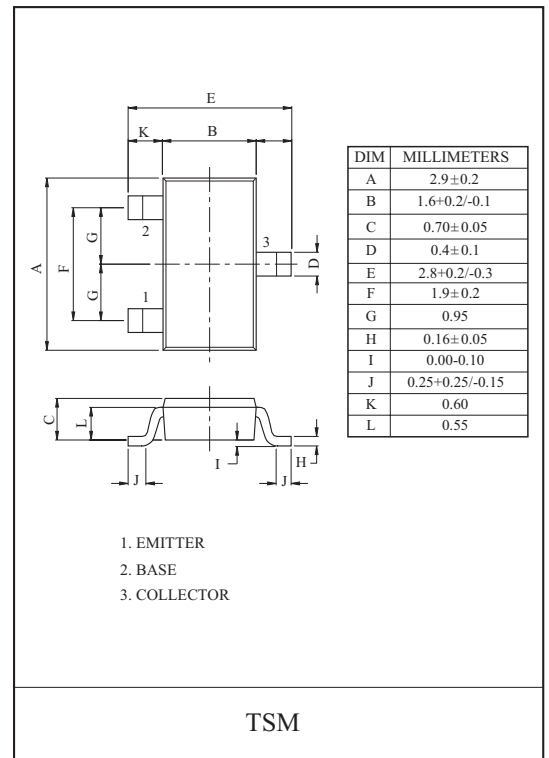
### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	-50	V
Collector-Emitter Voltage		$V_{CES}$	-50	V
		$V_{CEO}$	-50	
Emitter-Base Voltage		$V_{EBO}$	-6	V
Collector Current	DC	$I_C$	-3	A
	Pulse	$I_{CP}$	-6	
Base Current		$I_B$	-600	mA
Collector Power Dissipation		$P_C^*$	0.9	W
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

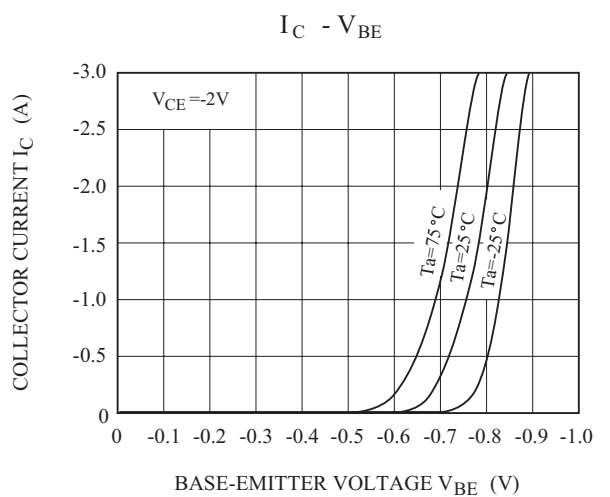
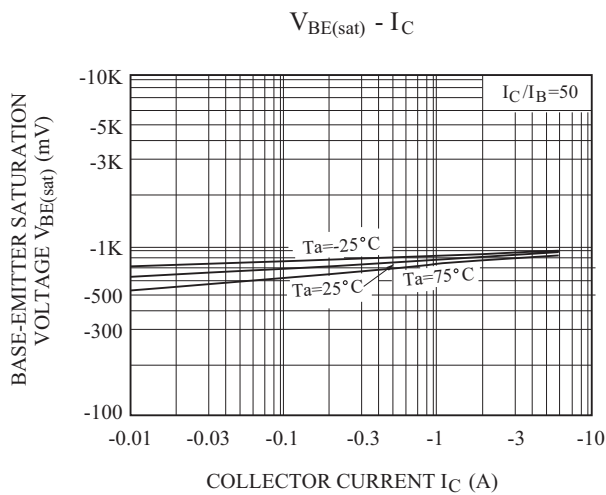
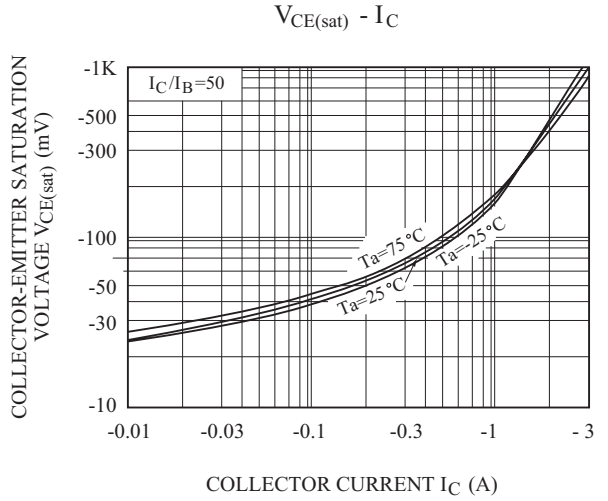
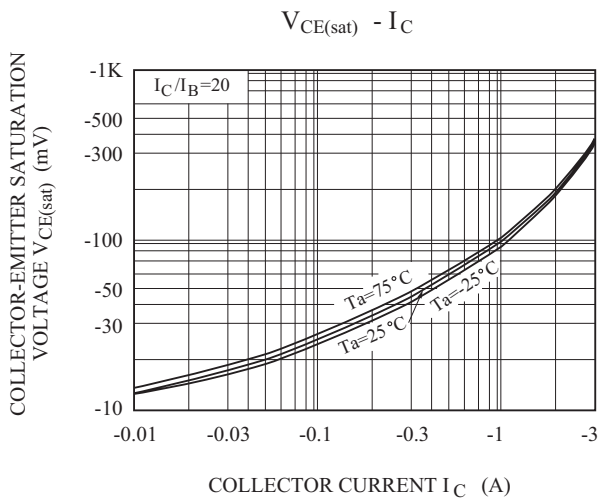
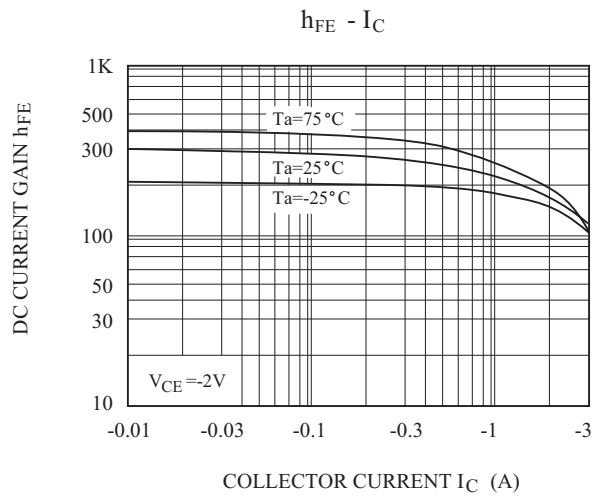
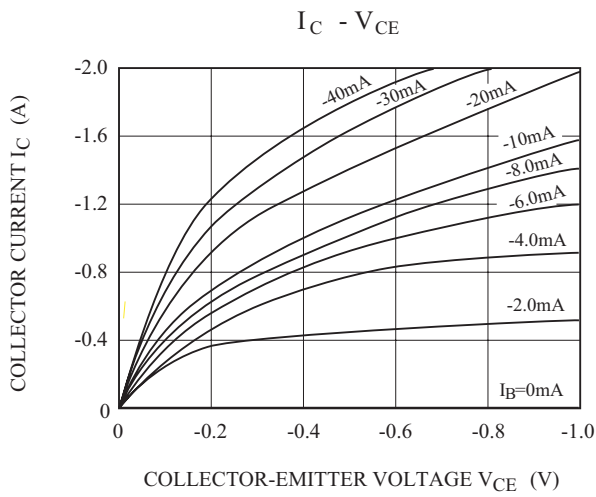
\* Package mounted on a ceramic board (600mm<sup>2</sup> × 0.8mm)

### ELECTRICAL CHARACTERISTICS (Ta=25 )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=-40V, I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=-4V, I_C=0$	-	-	-0.1	μA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-50	-	-	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CES}$	$I_C=-100\mu A, V_{BE}=0$	-50	-	-	V
		$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-50	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-6	-	-	V
Collector-Emitter Saturation Voltage		$V_{CE(sat)1}$	$I_C=-1A, I_B=-50mA$	-	-100	-200	mV
		$V_{CE(sat)2}$	$I_C=-2A, I_B=-100mA$	-	-185	-500	mV
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=-2A, I_B=-100mA$	-	-0.88	-1.2	V
DC Current Gain		$h_{FE}$	$V_{CE}=-2V, I_C=-100mA$	200	-	560	
Transition Frequency		$f_T$	$V_{CE}=-10V, I_C=-500mA$	-	360	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=-10V, f=1MHz$	-	24	-	pF
Switching Time	Turn-On Time	$t_{on}$		-	30	-	nS
	Storage Time	$t_{stg}$		-	230	-	
	Fall Time	$t_f$		-	15	-	

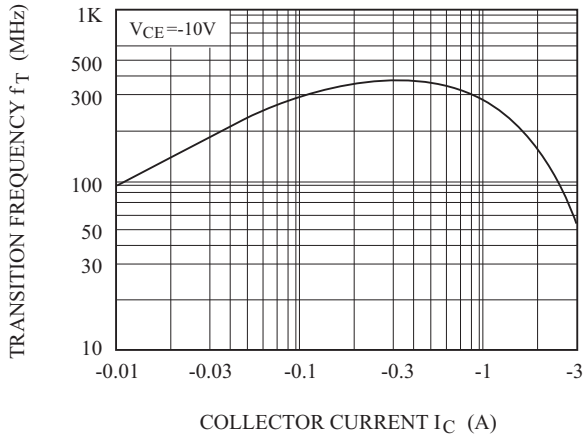


# KTA1552T

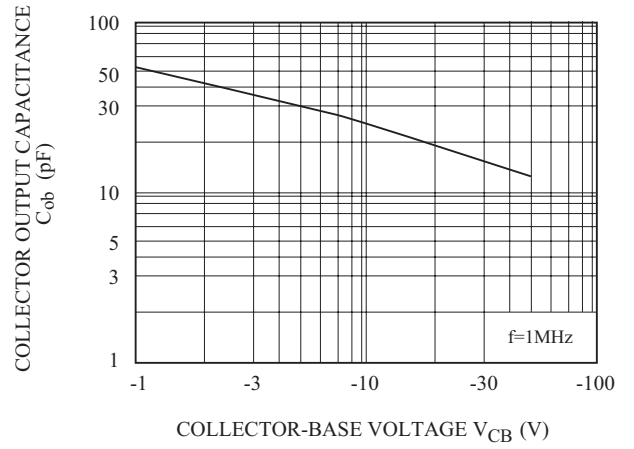


# KTA1552T

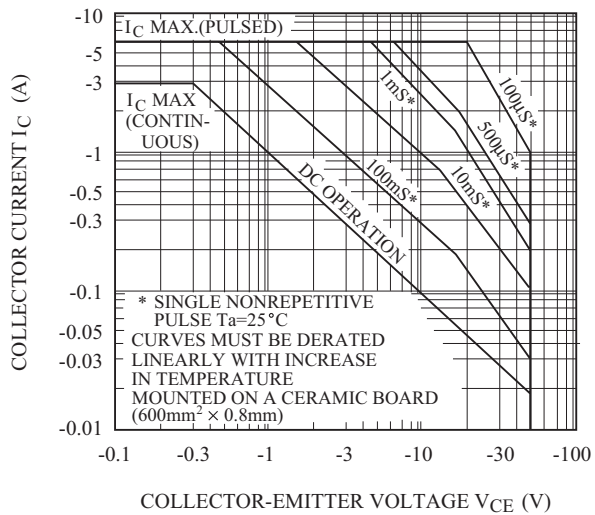
$f_T - I_C$



$C_{ob} - V_{CB}$



SAFE OPERATING AREA



$P_c - T_a$

