

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

### FEATURES

- High Current.
- Low  $V_{CE(sat)}$ 
  - :  $V_{CE(sat)}$  250mV at  $I_C=200mA/I_B=10mA$ .
- Complementary to KTA702E.
- Suffix U : Qualified to AEC-Q101.
  - ex) KTC802E-RTK/HU

### MAXIMUM RATINGS (Ta=25 )

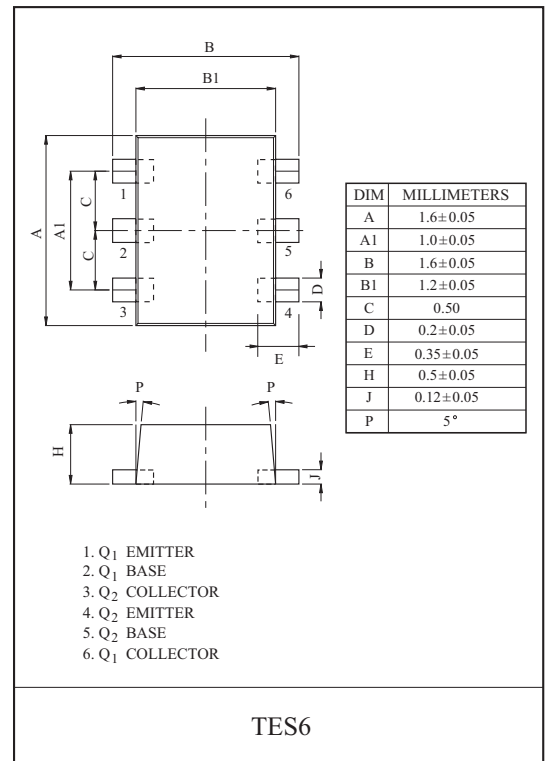
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	15	V
Collector-Emitter Voltage	$V_{CEO}$	12	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	500	mA
	$I_{CP}$ (Note)	1	A
Collector Power Dissipation	$P_C^*$	200	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

Note : Single pulse  $P_w=1mS$ .

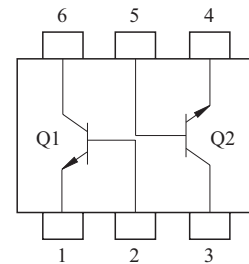
\* Total Rating.

### ELECTRICAL CHARACTERISTICS (Ta=25 )

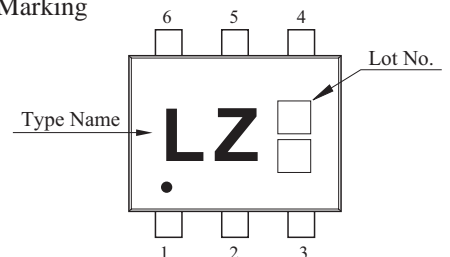
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=15V, I_E=0$	-	-	100	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A$	15	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA$	12	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A$	6	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=2V, I_C=10mA$	270	-	680	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200mA, I_B=10mA$	-	90	250	mV
Transition Frequency	$f_T$	$V_{CE}=2V, I_C=10mA, f_T=100MHz$	-	320	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	7.5	-	pF



### EQUIVALENT CIRCUIT (TOP VIEW)

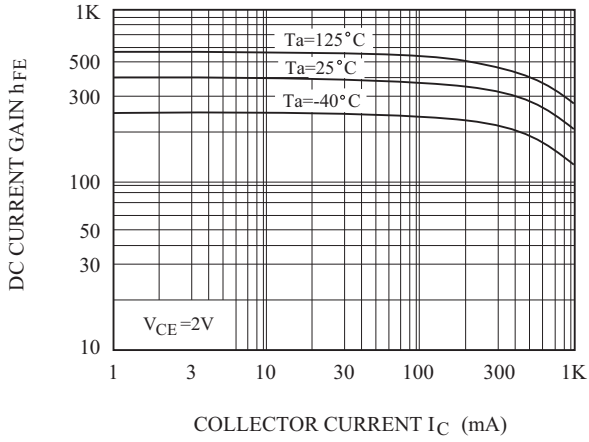


### Marking

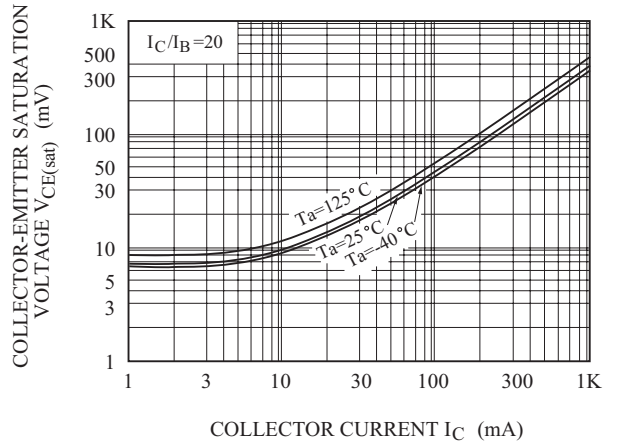


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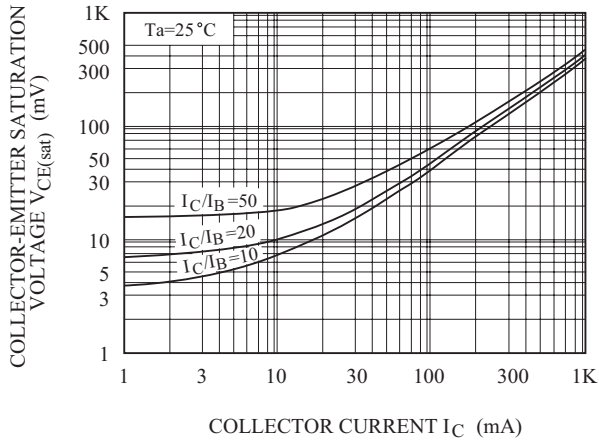
$h_{FE} - I_C$



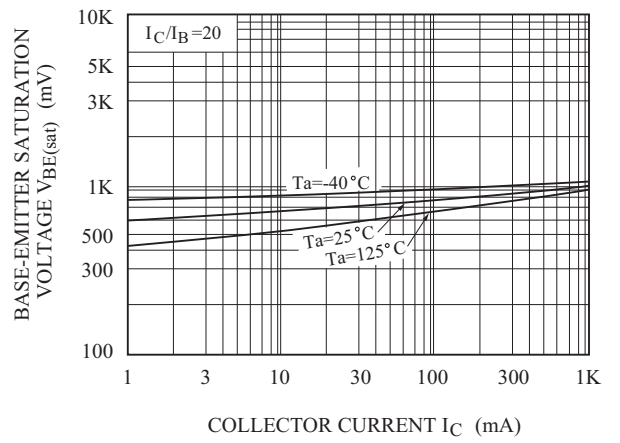
$V_{CE(sat)} - I_C$



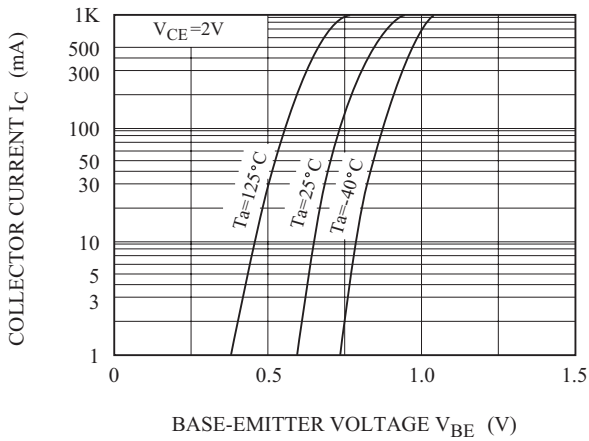
$V_{CE(sat)} - I_C$



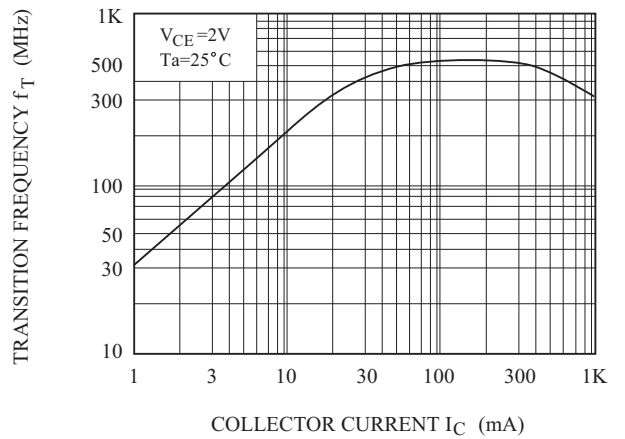
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



$f_T - I_C$



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