

SWITCHING APPLICATION.

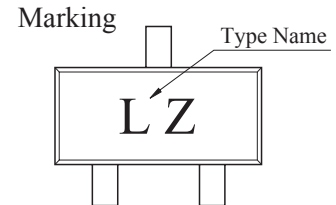
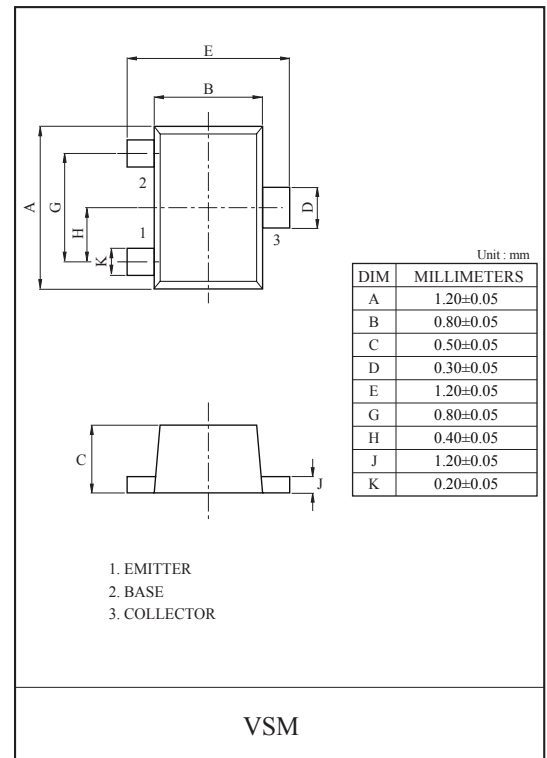
FEATURES

- High Current.
 - Low $V_{CE(sat)}$.
: $V_{CE(sat)} \leq 250\text{mV}$ at $I_C=200\text{mA}/I_B=10\text{mA}$.
 - Complementary to KTA2012V.
- Suffix U : Qualified to AEC-Q101.
ex) KTC4072V-RTL/HU

MAXIMUM RATING (Ta=25°C)

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}^*	1	A
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

* Single pulse Pw=1mS.

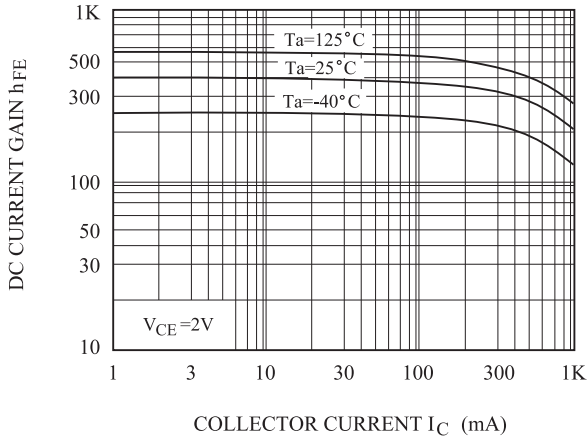


ELECTRICAL CHARACTERISTICS (Ta=25°C)

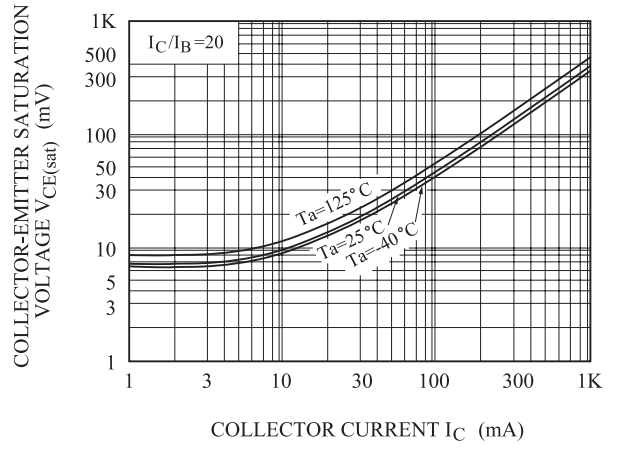
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15\text{V}, I_E=0$	-	-	100	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}$	15	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$	12	-	-	V
Emitter-Base Breakdown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

KTC4072V

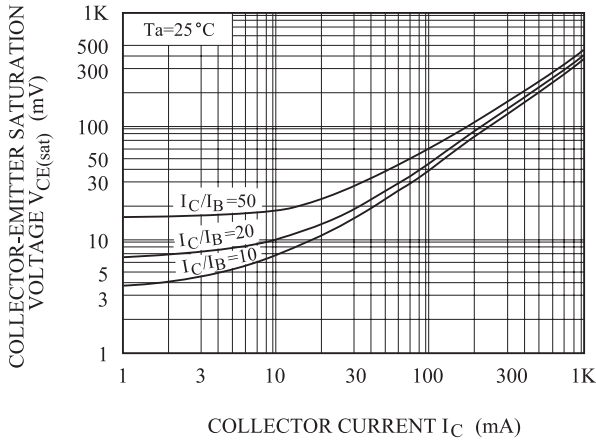
$h_{FE} - I_C$



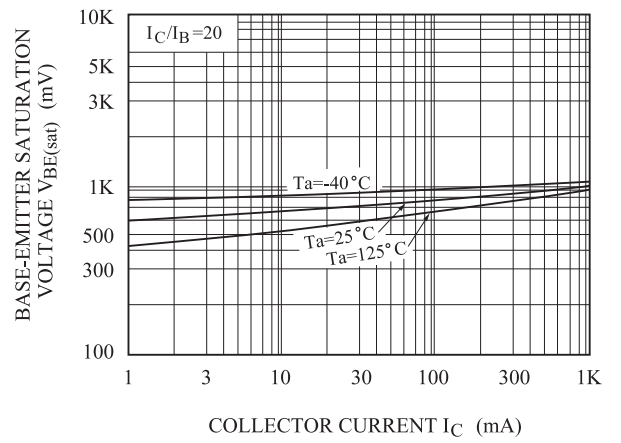
$V_{CE(sat)} - I_C$



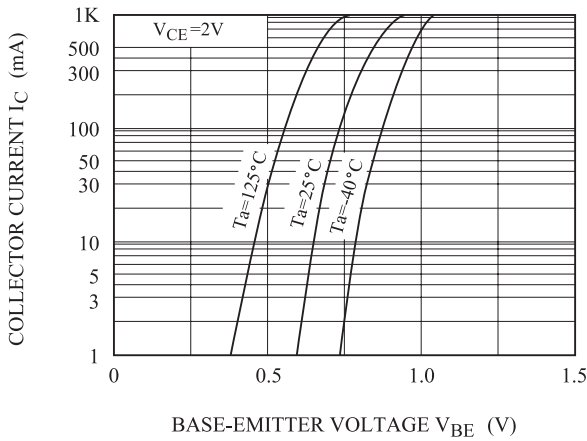
$V_{CE(sat)} - I_C$



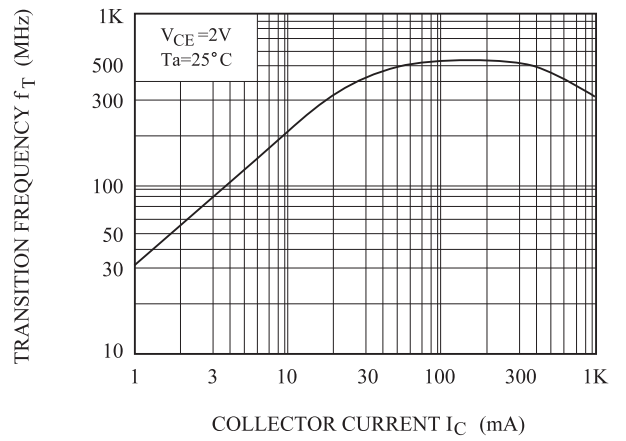
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$

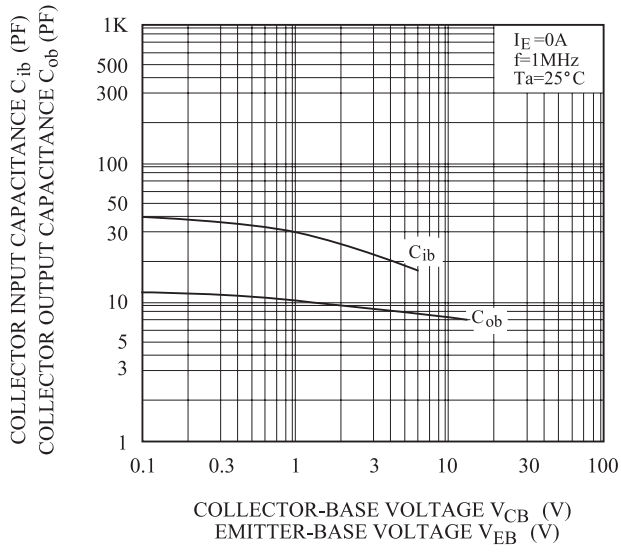


$f_T - I_C$



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$C_{ob} - V_{CB}$, $C_{ib} - V_{EB}$



$P_c - T_a$

