

POWER AMPLIFIER APPLICATION.  
POWER SWITCHING APPLICATION.

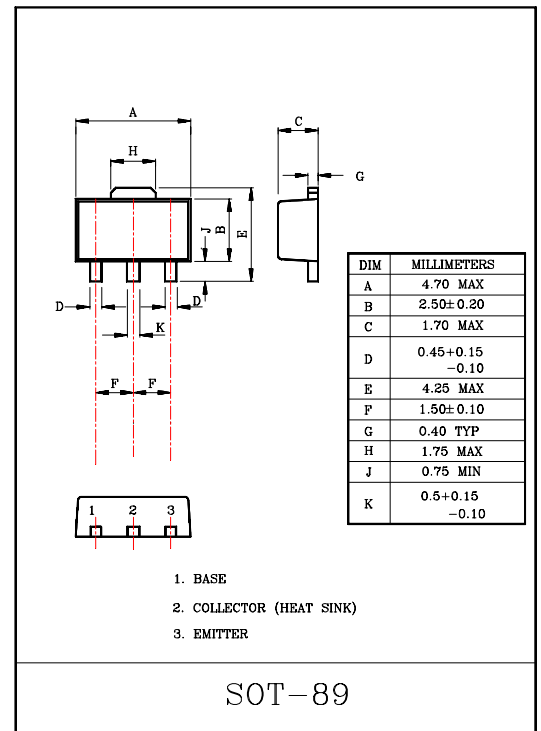
### FEATURES

- Low Saturation Voltage.  
:  $V_{CE(sat)}=0.5V(\text{Max.}) (I_C=1A)$
- High Speed Switching Time:  $t_{stg}=1.0\mu S(\text{Typ.})$
- $P_C=1\sim 2W$  (Mounted on Ceramic Substrate)
- Small Flat Package.
- Complementary to KTA1666.

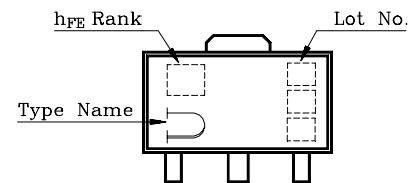
### MAXIMUM RATINGS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	2	A
Emitter Current	$I_B$	0.4	A
Collector Power Dissipation	$P_C$	500	mW
	$P_C *$	1	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

$P_C*$  : KTC4379 mounted on ceramic substrate ( $250\text{mm}^2 \pm 0.8t$ )

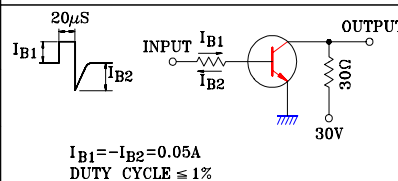


### Marking



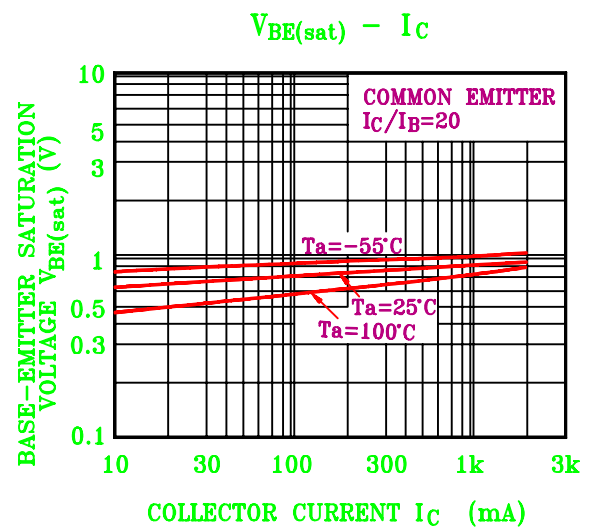
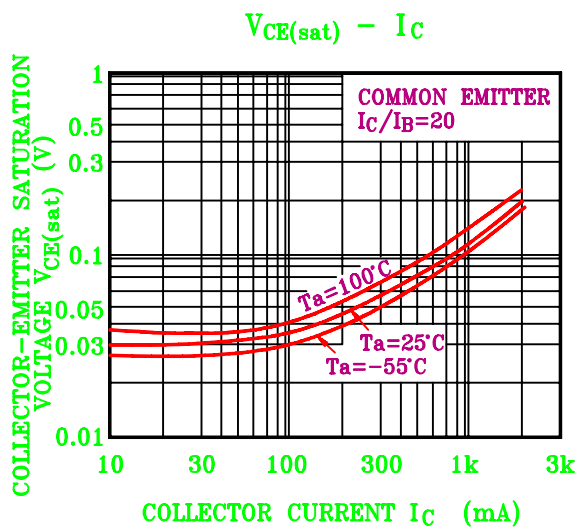
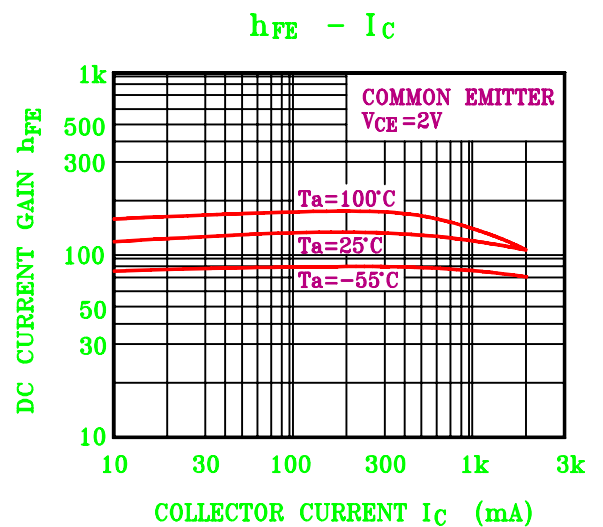
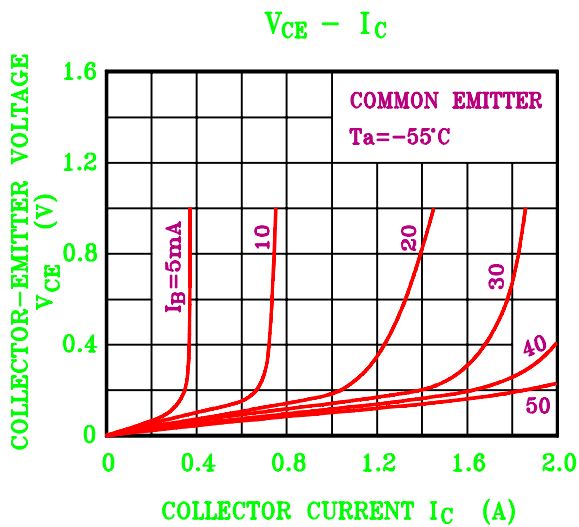
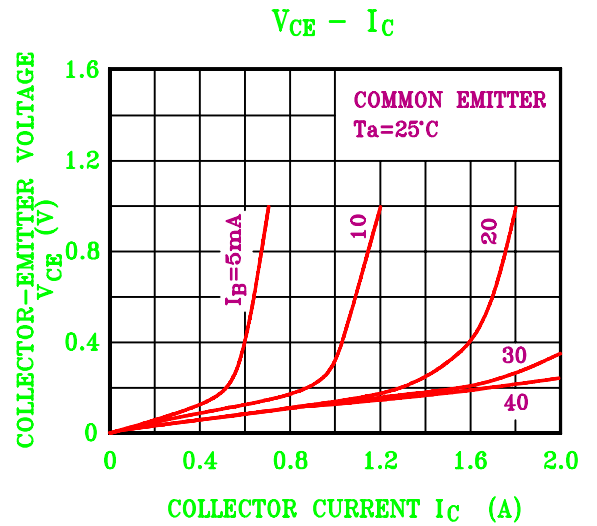
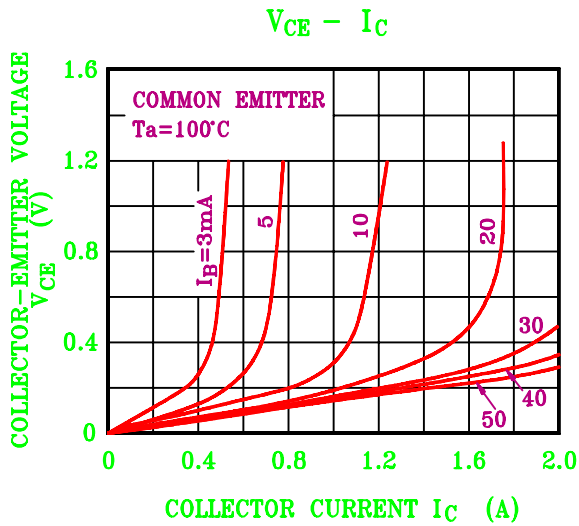
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=50V, I_E=0$	-	-	0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	0.1	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_E=0$	50	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note2)	$V_{CE}=2V, I_C=0.5A$ (Note 1)	70	-	240	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=1.5A$ (Note 1)	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$ (Note 1)	-	-	0.5	V
Base-Emitter Satiratompm Voltage	$V_{BE(SAT)}$	$I_C=1A, I_B=0.05A$ (Note 1)	-	-	1.2	V
Transition Frequency	$f_T$	$V_{CE}=2V, I_C=0.5A$	-	120	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	30	-	pF
Switching Time	Turn on Time	$t_{on}$	-	0.1	-	$\mu S$
	Storage Time	$t_{stg}$	-	1.0	-	
	Fall Time	$t_f$	-	0.1	-	

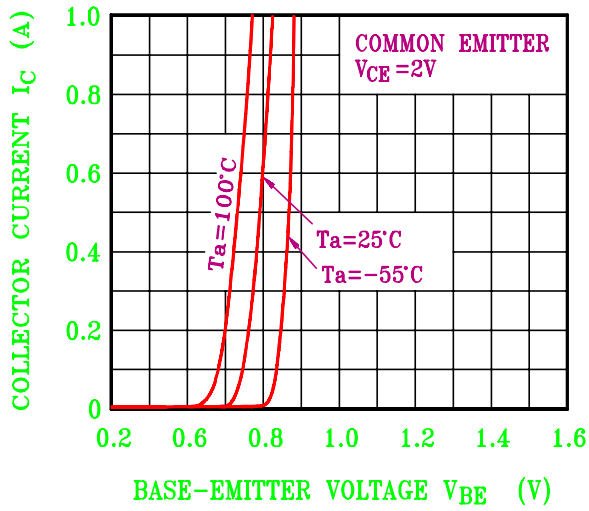


Note 1 : Pulse width  $\leq 300\mu S$ , Duty Cycle  $\leq 1\%$   
2 :  $h_{FE}$  Classification O:70~140, Y:120~240

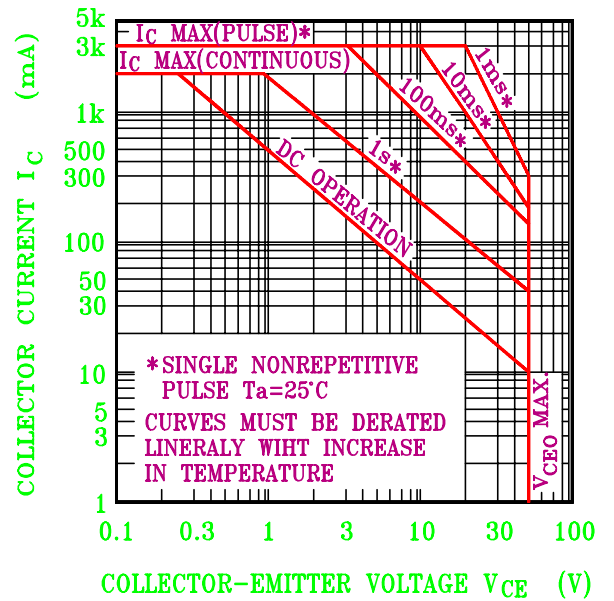
# KTC4379



$I_C - V_{BE}$



SAFE OPERATING AREA



$P_C - T_a$

