

POWER AMPLIFIER APPLICATIONS.
POWER SWITCHING APPLICATIONS.

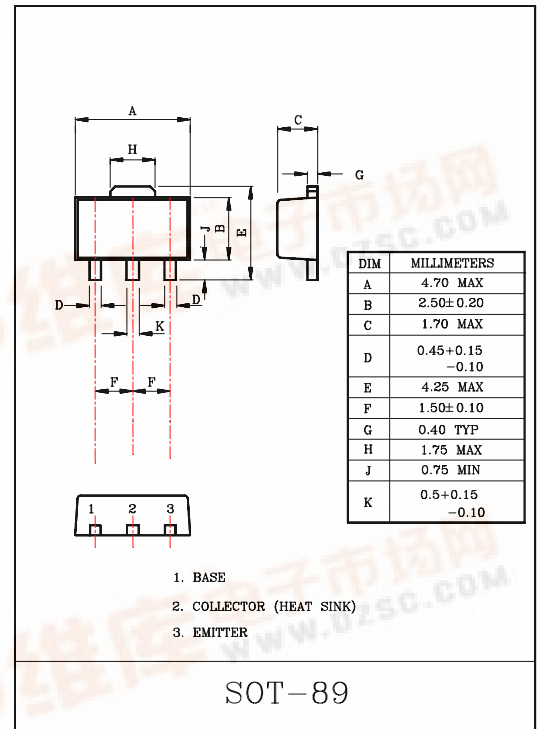
FEATURES

- 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 : KTC4379.

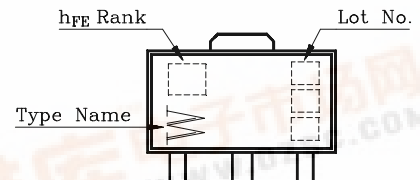
MAXIMUM RATINGS ($T_a = 25^\circ C$)

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
Base 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 *:KTA1666 mounted on ceramic substrate (250mm²×0.8t)



Marking



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

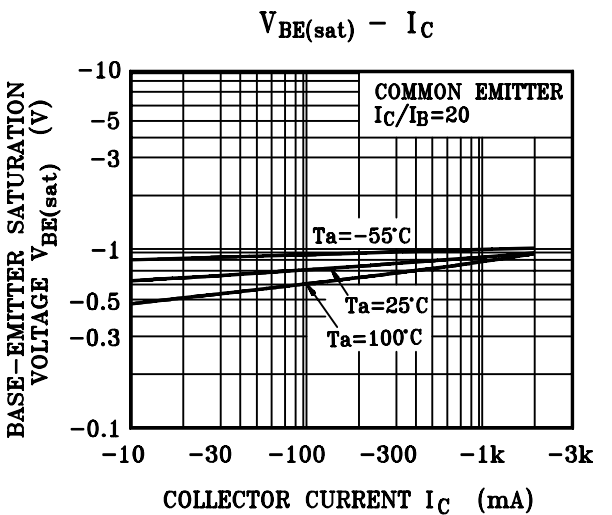
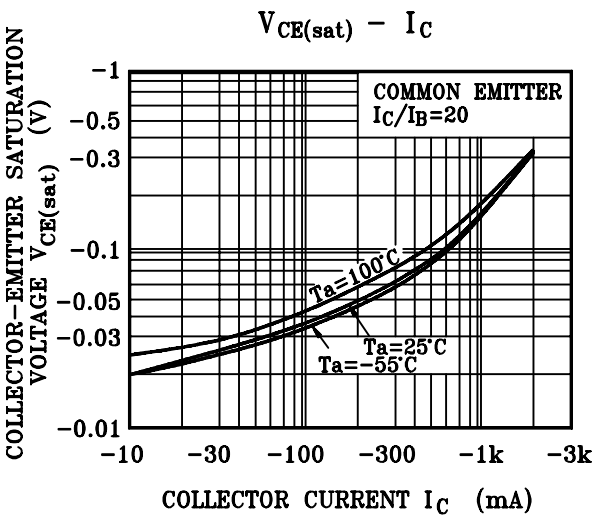
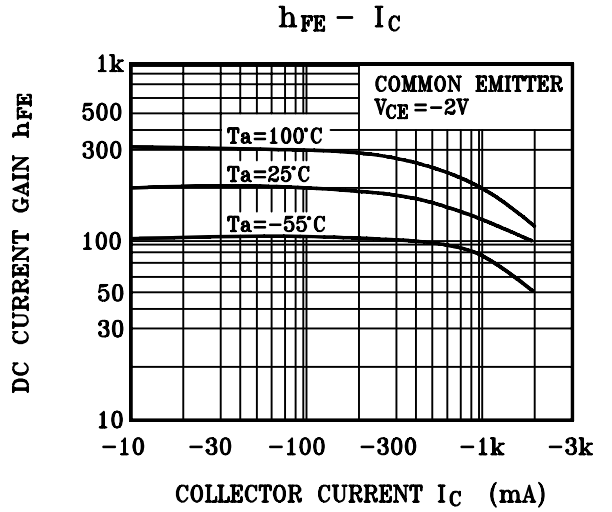
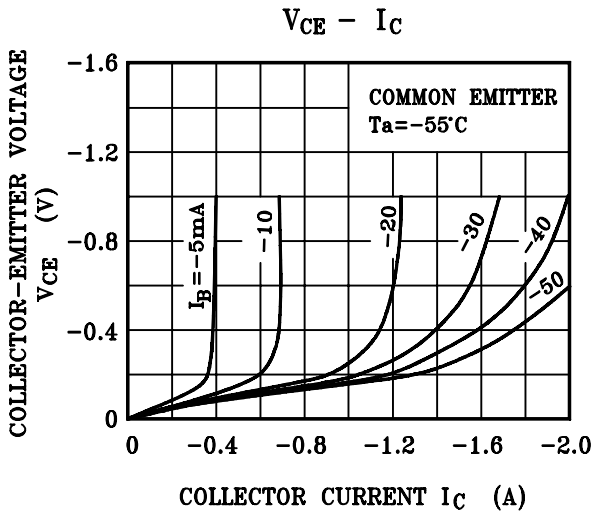
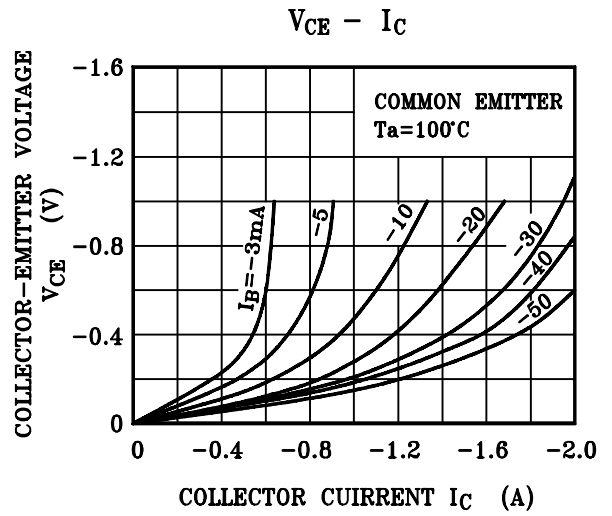
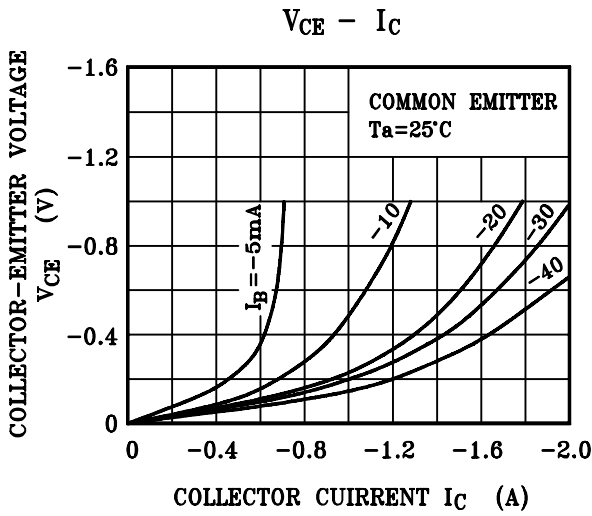
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V, I_E = 0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-50	-	-	V
DC Current Gain	$h_{FE} (1)$ (Note 2)	$V_{CE} = -2V, I_C = -0.5A$ (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 Saturation 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}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	40	-	pF
Switching Time	Turn-on Time	t_{on}		0.1	-	μS
	Storage Time	t_{stg}		-	1.0	
	Fall Time	t_f		-	0.1	

Note 1 : Pulse width $\leq 300\mu S$, Duty Cycle $\leq 2\%$

Note 2 : $h_{FE} (1)$ Classification 0:70~140, Y:120~240



KTA1666



KTA1666

