

CAMERA STROBO FLASH APPLICATION.
HIGH CURRENT APPLICATION.

FEATURES

- $h_{FE}=100 \sim 320$ ($V_{CE}=-2V$, $I_C=-0.5A$).
- $h_{FE}=70$ (Min.) ($V_{CE}=-2V$, $I_C=-3A$).
- Low Collector Saturation Voltage.
: $V_{CE(sat)}=-0.5V$ (Max.) ($I_C=-3A$, $I_B=-75mA$).
- High Power Dissipation.
: $P_C=1W$ ($T_c=25^\circ C$), $P_C=0.5W$ ($T_a=25^\circ C$).

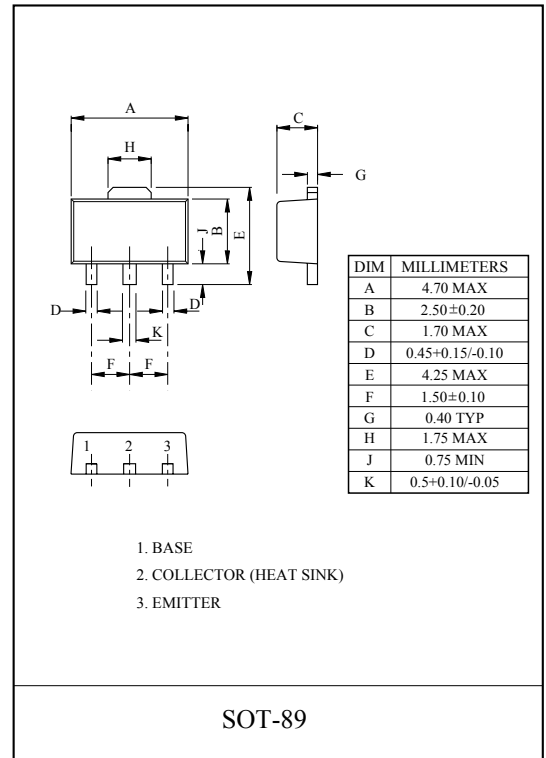
MAXIMUM RATING ($T_a=25^\circ C$)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-35	V
Collector-Emitter Voltage		V_{CEO}	-20	V
Emitter-Base Voltage		V_{EBO}	-8	V
Collector Current	DC	I_C	-3	A
	Pulse (Note1)	I_{CP}	-5	A
Base Current		I_B	-0.5	A
Collector Power Dissipation	$T_a=25^\circ C$	P_C	0.5	W
	$T_c=25^\circ C$ *		1	
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ C$

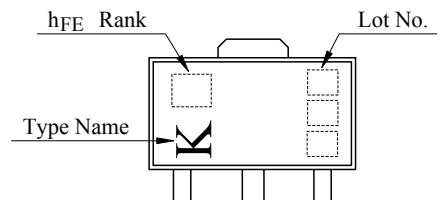
Note1 : Pulse Test : Pulse width=10ms(Max.)

Duty cycle=30%(Max.)

* P_C : KTA1001 mounted on ceramic substrate(250mm²x0.8t)



Marking



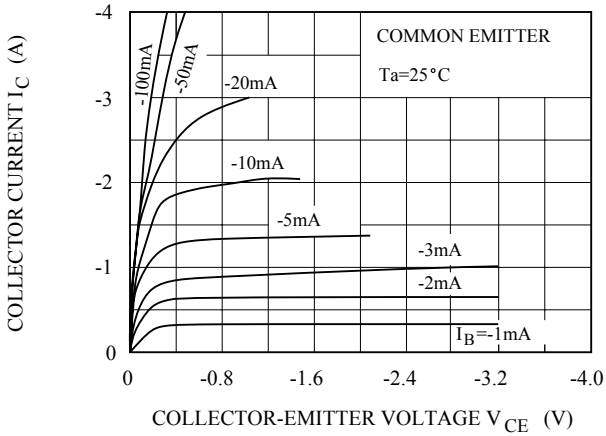
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-35V$, $I_E=0$	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-8V$, $I_C=0$	-	-	-100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-10mA$, $I_B=0$	-20	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-1mA$, $I_C=0$	-8	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note2)	$V_{CE}=-2V$, $I_C=-0.5A$	100	-	320	
	$h_{FE}(2)$	$V_{CE}=-2V$, $I_C=-3A$	70	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-3A$, $I_B=-75mA$	-	-	-0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-2V$, $I_C=-3A$	-	-	-1.5	V
Transition Frequency	f_T	$V_{CE}=-2V$, $I_C=-0.5A$	-	170	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$	-	62	-	pF

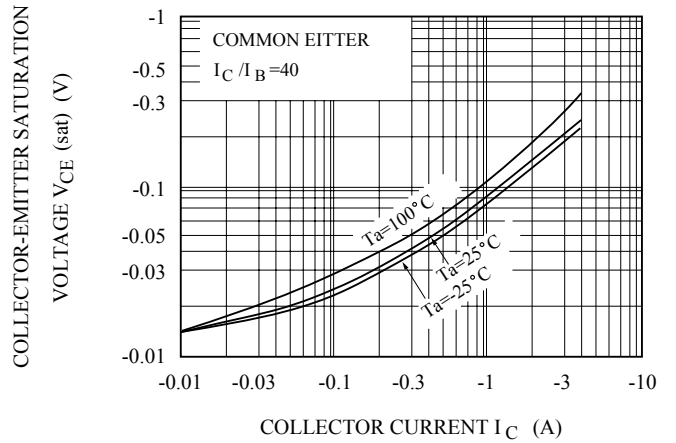
Note2 : $h_{FE}(1)$ Classification 0:100 ~ 200, Y:160 ~ 320

KTA1001

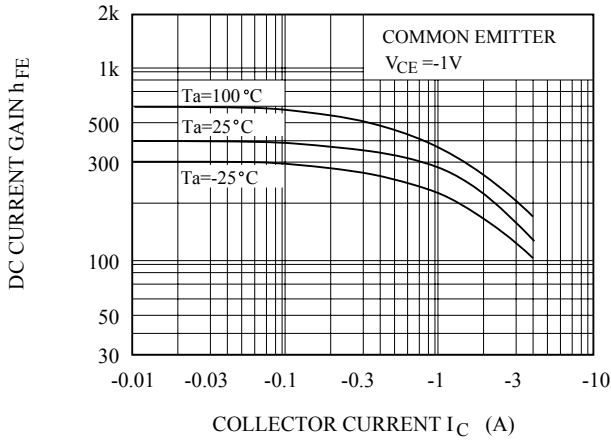
$I_C - V_{CE}$



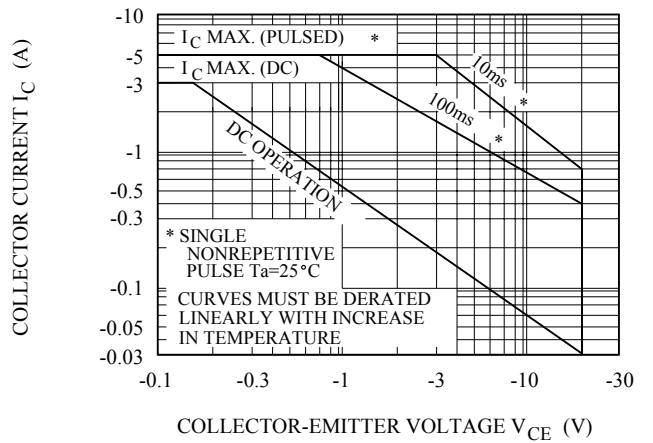
$V_{CE}(\text{sat}) - I_C$



$h_{FE} - I_C$



SAFE OPERATING AREA



$P_C - T_a$

