

HIGH CURRENT APPLICATION.

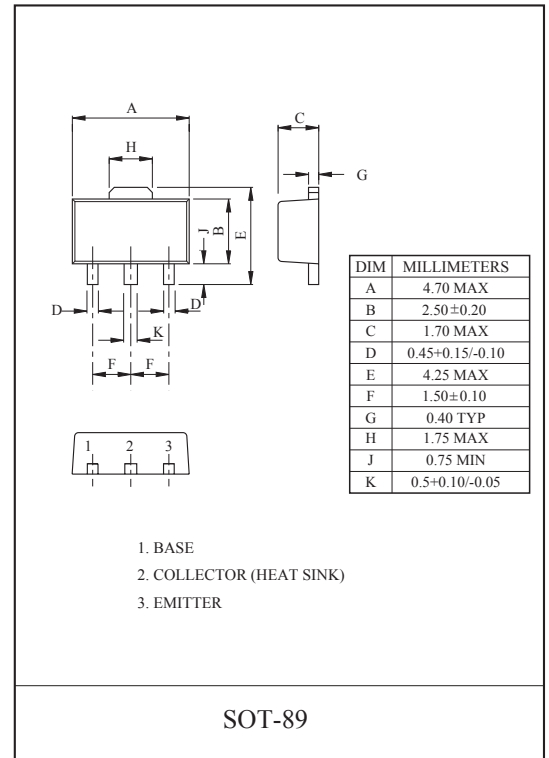
FEATURES

- 1W (Mounted on Ceramic Substrate).
- Small Flat Package.
- Complementary to KTA1663.

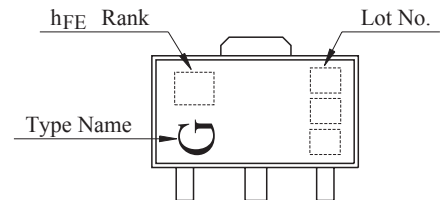
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Base Current	I_B	0.3	A
Collector Power Dissipation	P_C	500	mW
	P_C^*	1	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

P_C^* : KTC4375 mounted on ceramic substrate (250mm²x0.8t)



Marking

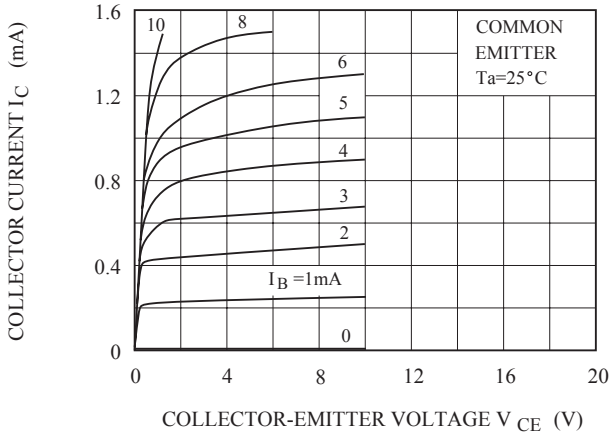


ELECTRICAL CHARACTERISTICS (Ta=25°C)

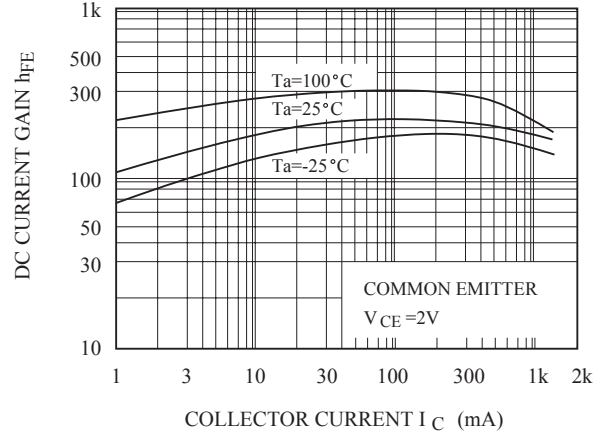
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=30V, I_E=0$	-	-	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5	-	-	V
DC Current Gain	h_{FE} (Note)	$V_{CE}=2V, I_C=500mA$	100	-	320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.5A, I_B=0.03A$	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=2V, I_C=500mA$	-	-	1.0	V
Transition Frequency	f_T	$V_{CE}=2V, I_C=500mA$	-	120	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	40	pF

Note : h_{FE} Classification O:100 ~ 200, Y:160 ~ 320

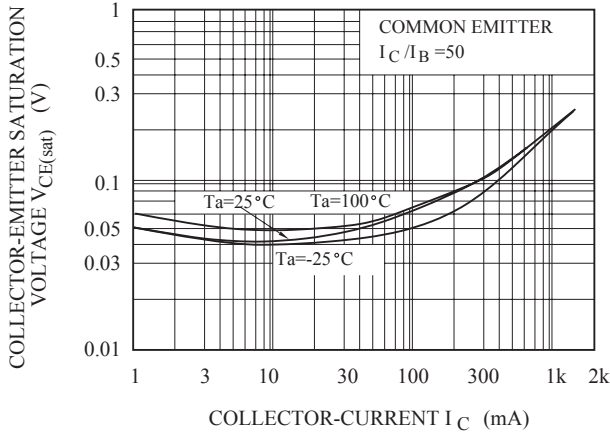
$I_C - V_{CE}$



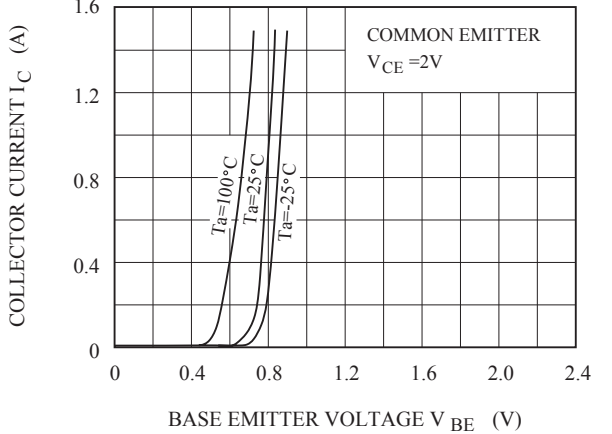
$h_{FE} - I_C$



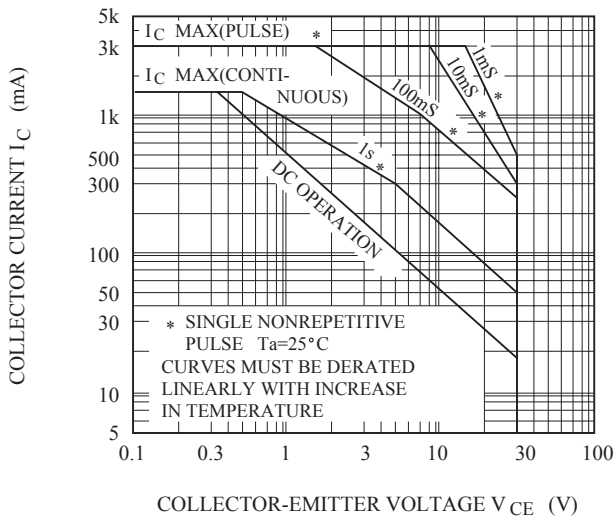
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



SAFE OPERATING AREA



$P_C - T_a$

