

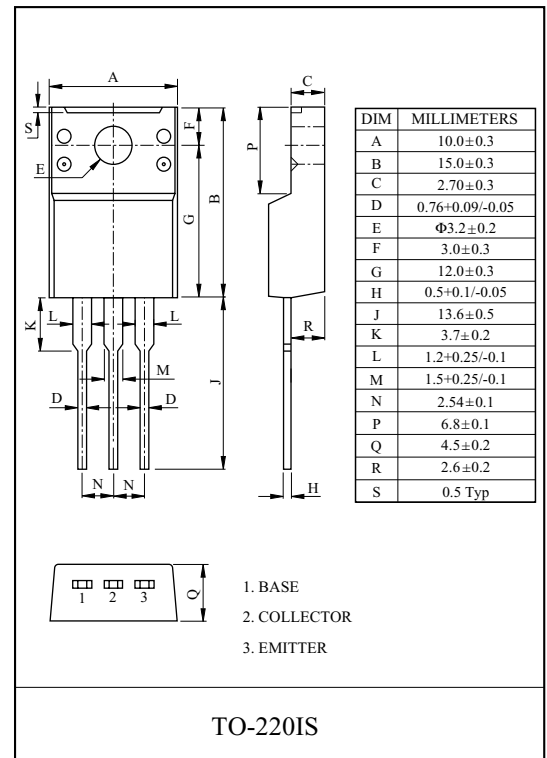
HIGH VOLTAGE APPLICATION.

### FEATURES

- High Transition Frequency :  $f_T=100\text{MHz(Typ.)}$ .
- Complementary to KTC4370/A.

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	KTA1659	$V_{CBO}$	-160	V
	KTA1659A		-180	
Collector-Emitter Voltage	KTA1659	$V_{CEO}$	-160	V
	KTA1659A		-180	
Emitter-Base Voltage		$V_{EBO}$	-5	V
Collector Current		$I_C$	-1.5	A
Base Current		$I_B$	-0.15	A
Collector Power Dissipation (Tc=25 °C)		$P_C$	20	W
Junction Temperature		$T_j$	150	°C
Storage Temperature Range		$T_{stg}$	-55 ~ 150	°C

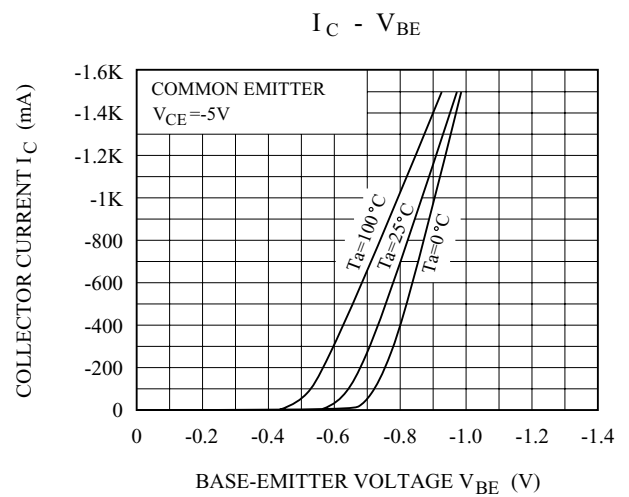
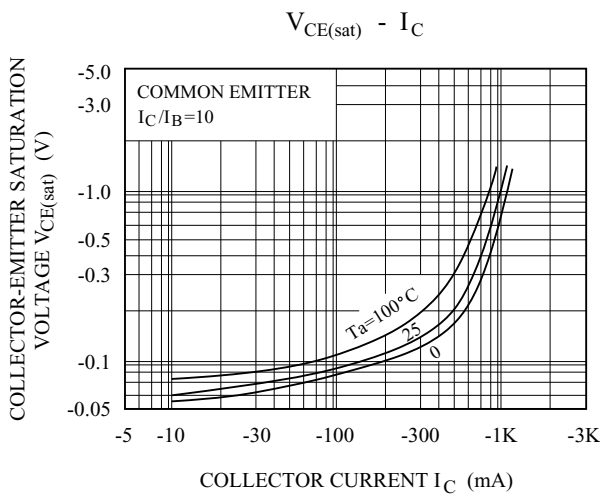
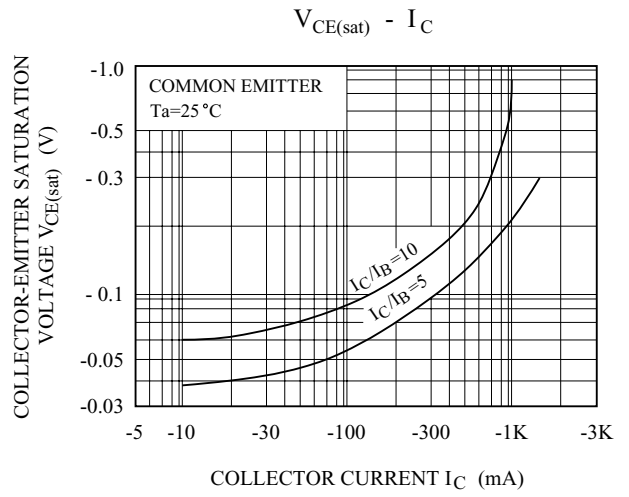
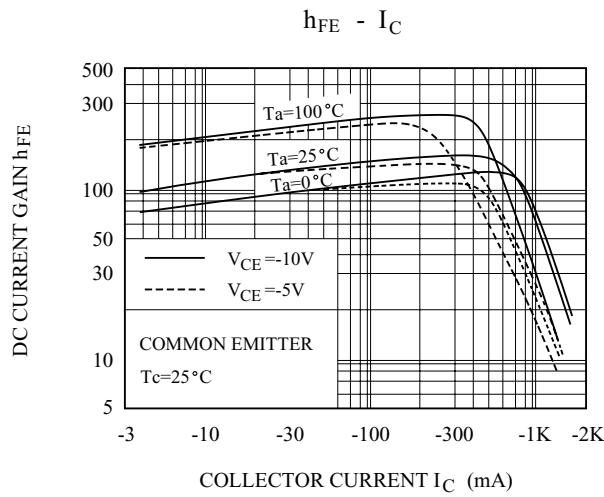
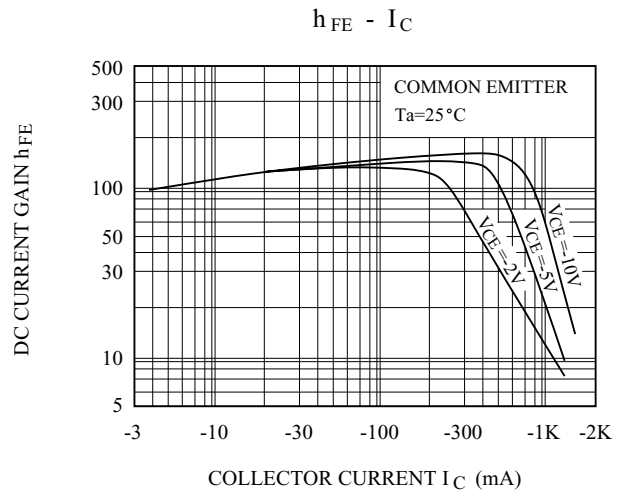
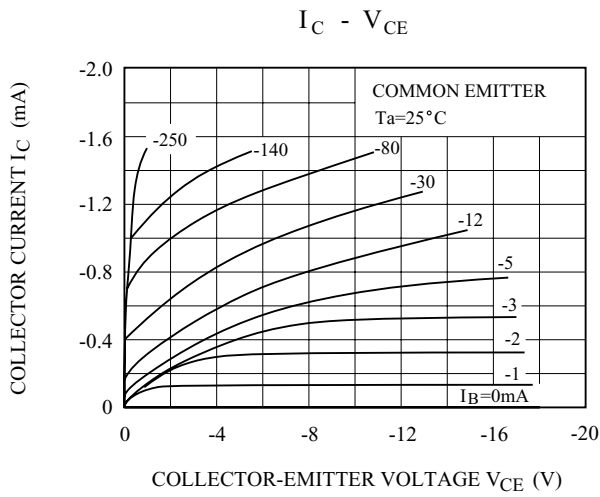


### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-160\text{V}, I_E=0$	-	-	-1.0	μA	
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$	-	-	-1.0	μA	
Collector-Emitter Breakdown Voltage	KTA1659	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-160	-	-	V
	KTA1659A			-180	-	-	
DC Current Gain	$h_{FE}$ (Note)	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$	70	-	240		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$	-	-	-1.5	V	
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=-5\text{V}, I_C=-500\text{mA}$	-	-	-1.0	V	
Transition Frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-100\text{mA}$	-	100	-	MHz	
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$	-	30	-	pF	

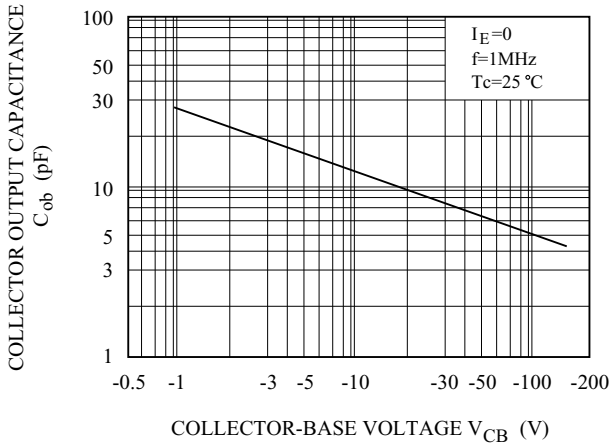
Note :  $h_{FE}$  Classification O:70~140, Y:120~240

# KTA1659/A

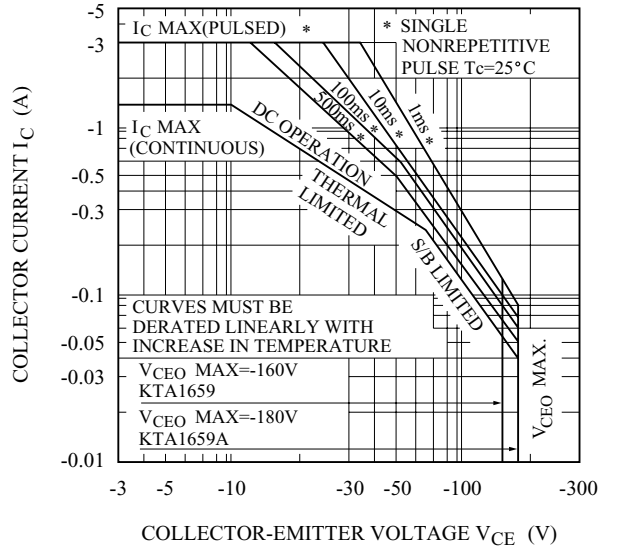


# KTA1659/A

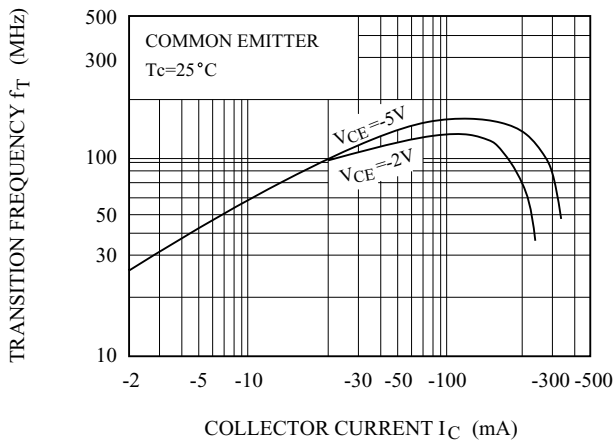
$C_{ob} - V_{CB}$



SAFE OPERATING AREA



$f_T - I_C$



$P_c - T_a$

