

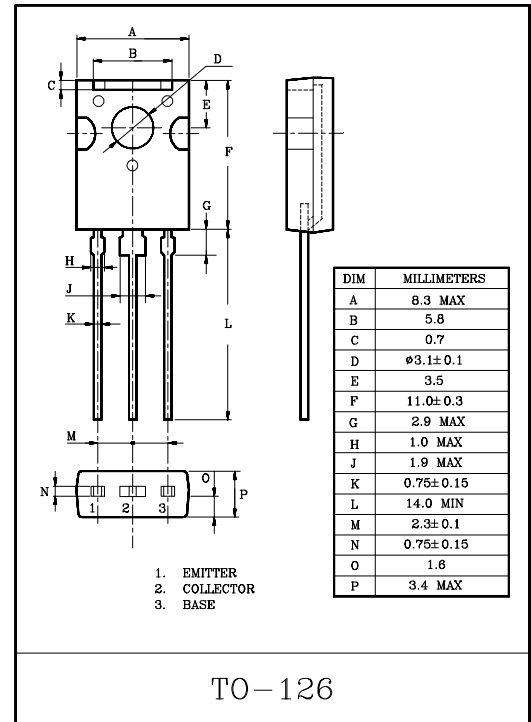
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.})$ ($I_C=1A$)
- High Speed Switching Time : $t_{stg}=1.0\mu S(\text{Typ.})$
- Complementary to KTA1715.

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 _E	-2	A
Collector Power Dissipation	Ta=25℃	P _C	1.5	W
	Tc=25℃		10	
Junction Temperature		T _j	150	℃
Storage Temperature Range		T _{stg}	-55~150	℃

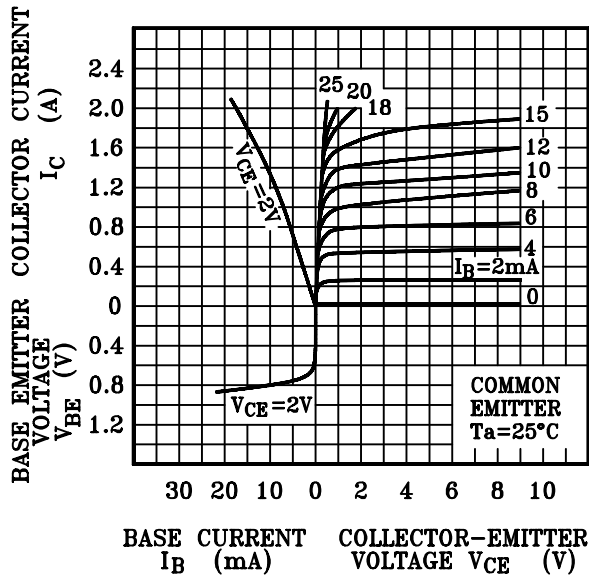


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

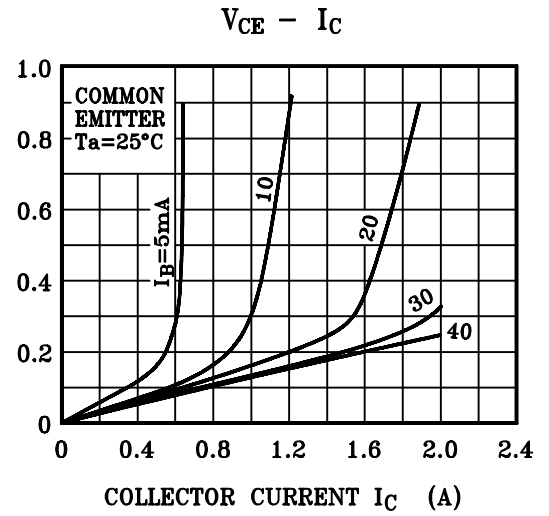
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50	-	-	V
DC Current Gain	$h_{FE} 1$ (Note)	$V_{CE}=2V, I_C=0.5A$	70	-	240	
	$h_{FE} 2$	$V_{CE}=2V, I_C=1.5A$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	1.2	V
Transition Frequency	f_T	$V_{CE}=2V, I_C=0.5A$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	30	-	pF
Switching Time	Turn On Time	t_{on}	$I_{B1} = -I_{B2} = -0.05A$ DUTY CYCLE $\leq 1\%$	0.1	-	μS
	Storage Time	t_{stg}		1.0	-	
	Fall Time	t_f		0.1	-	

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

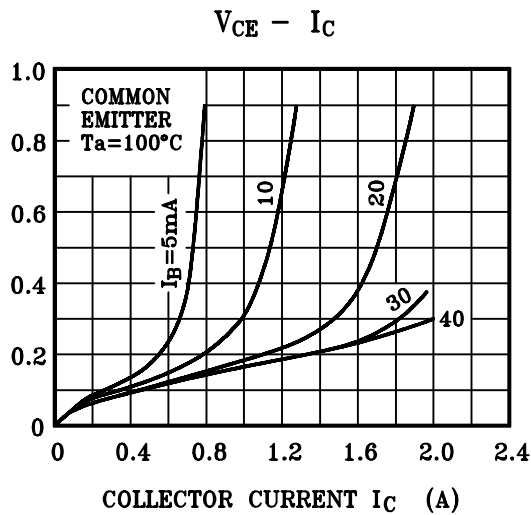
STATIC CHARACTERISTICS



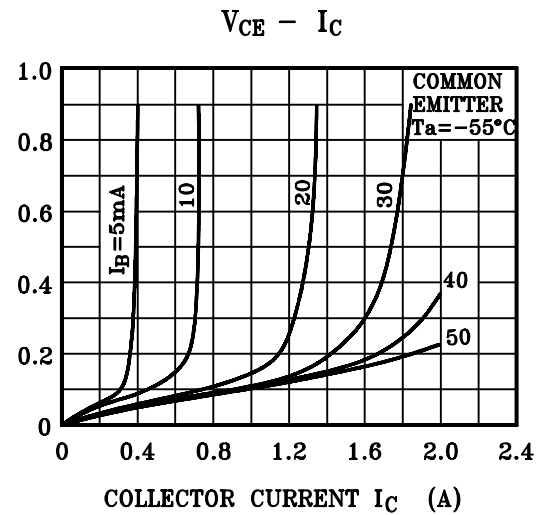
$V_{CE} - I_C$



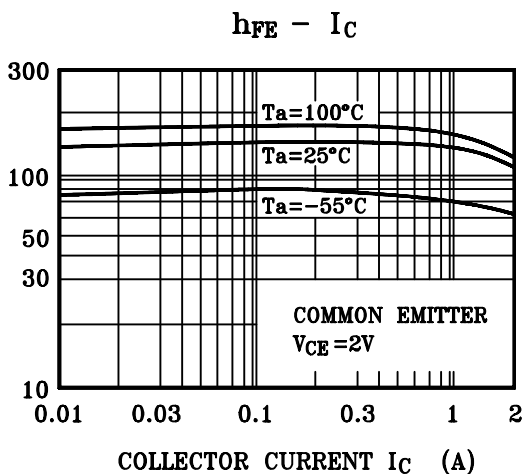
$V_{CE} - I_C$



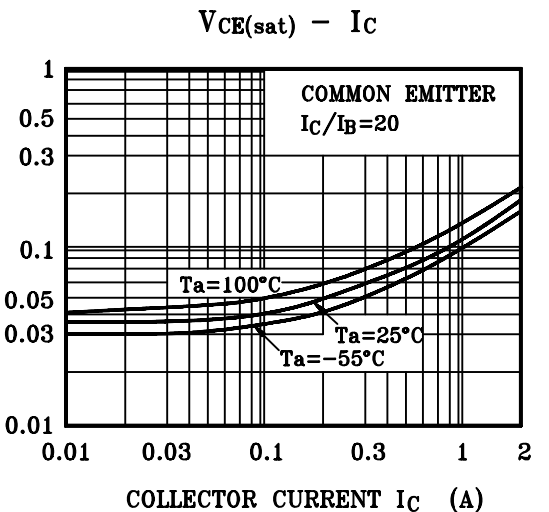
$V_{CE} - I_C$



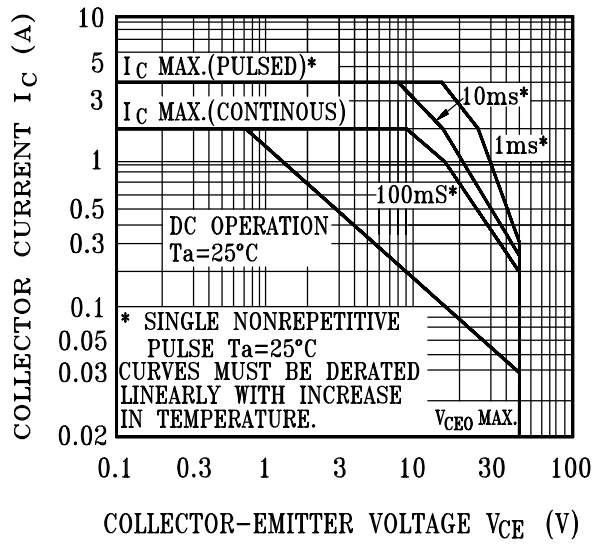
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA



$P_C - T_a$

