

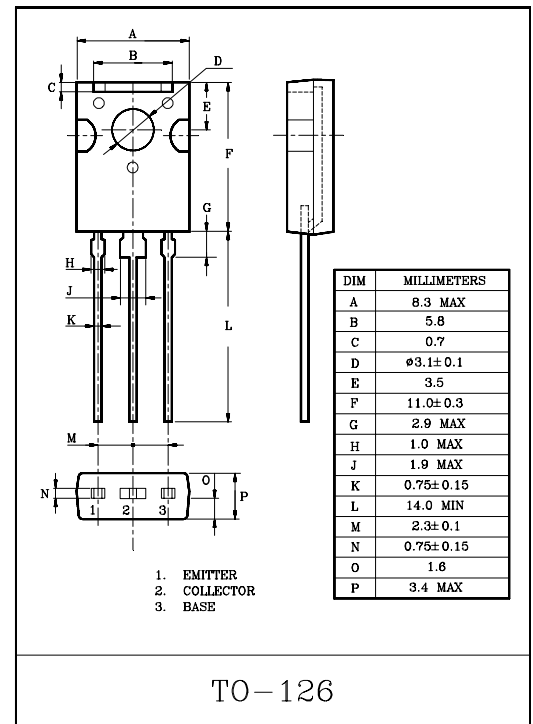
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.5V(\text{Max.})$ ($I_C = -1A$)
- High Speed Switching Time : $t_{stg} = 1\mu S(\text{Typ.})$
- Complementary to KTC2814.

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

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
Collector Power Dissipation	$T_a = 25^\circ C$	P_C	1.5	W
	$T_c = 25^\circ C$		10	
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ C$

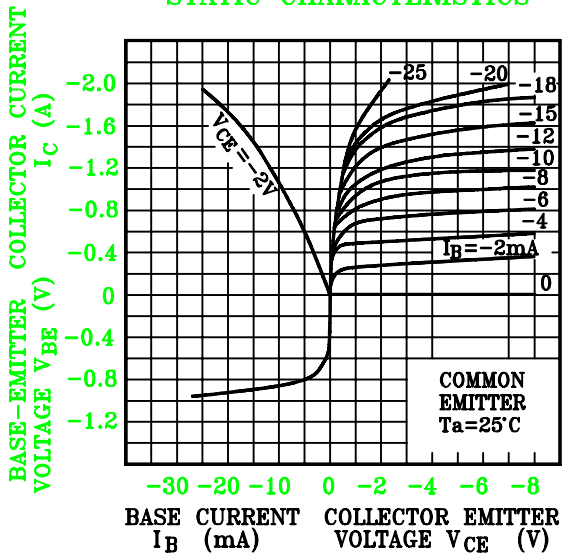


ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

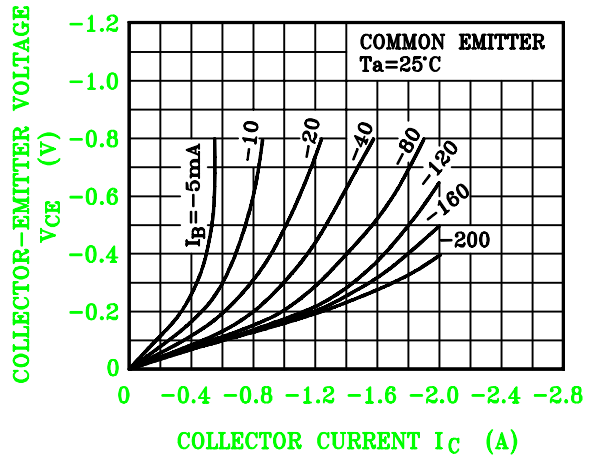
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = -50V, I_E = 0$	-	-	-0.1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-0.1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-50	-	-	V
DC Current Gain	$h_{FE} 1$ (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}	<p style="text-align: center;">$-I_{B1} = I_{B2} = 0.05A$ DUTY CYCLE $\leq 1\%$</p>	-	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

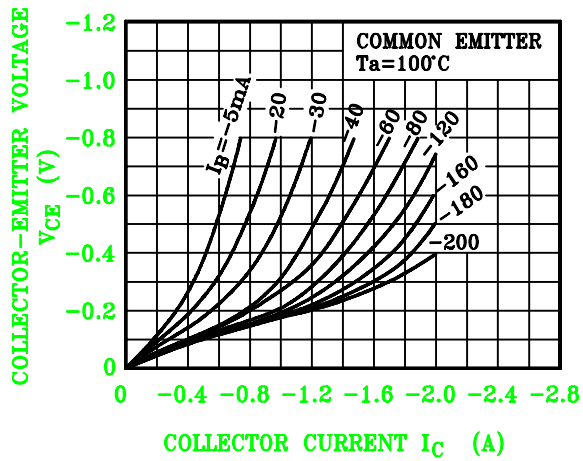
STATIC CHARACTERISTICS



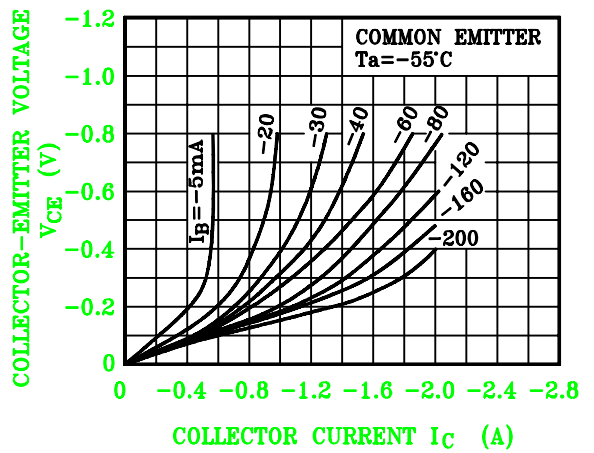
V_{CE} - I_C



V_{CE} - I_C



V_{CE} - I_C



h_{FE} - I_C

