

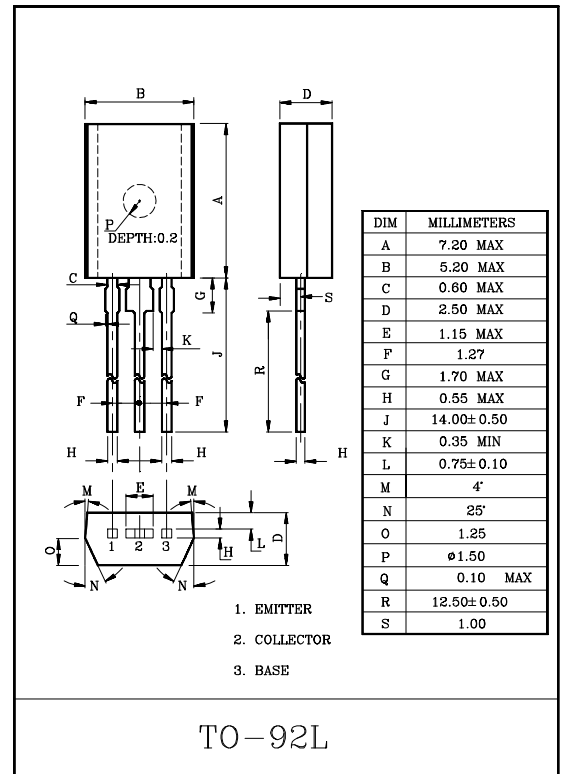
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURE

- Low 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 KTA1281.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

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	P_C	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



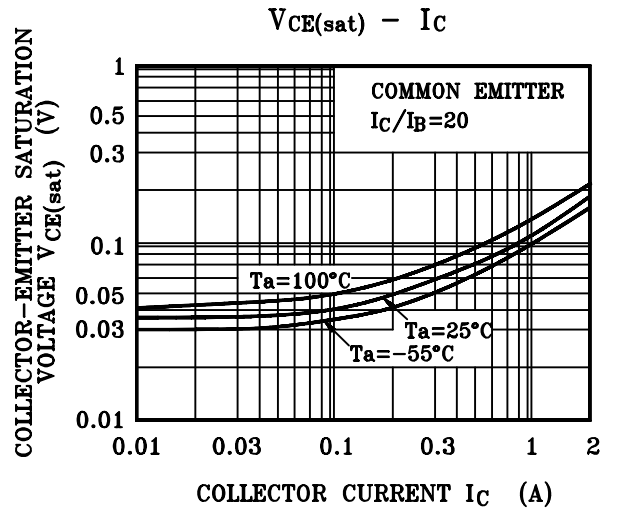
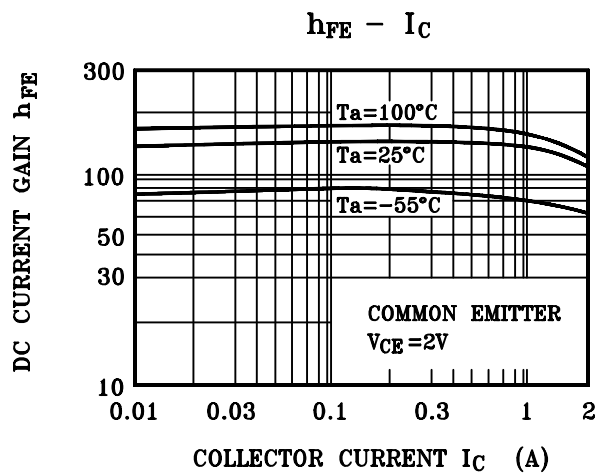
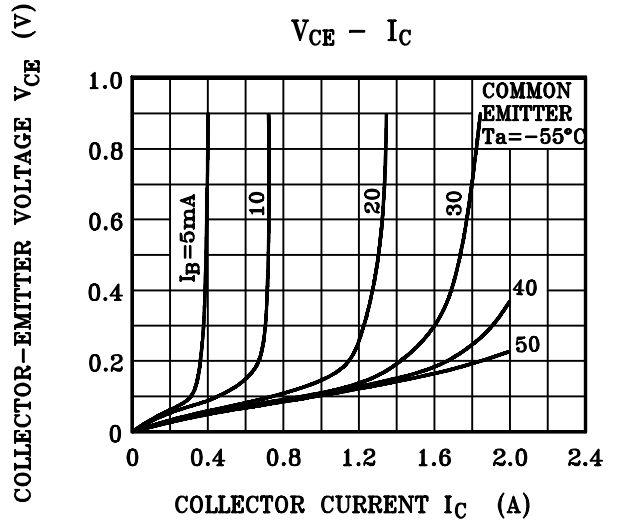
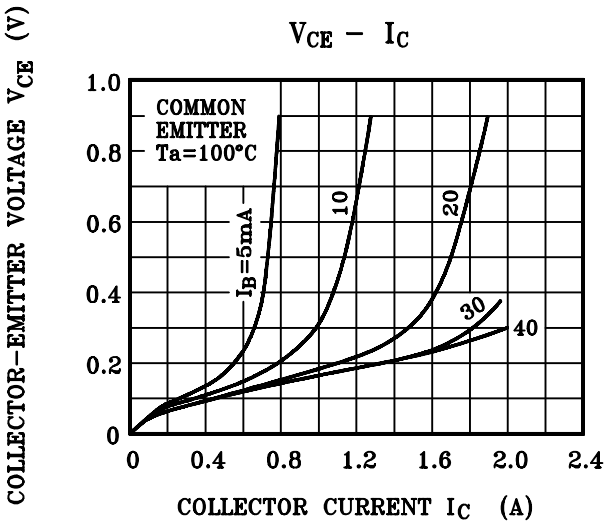
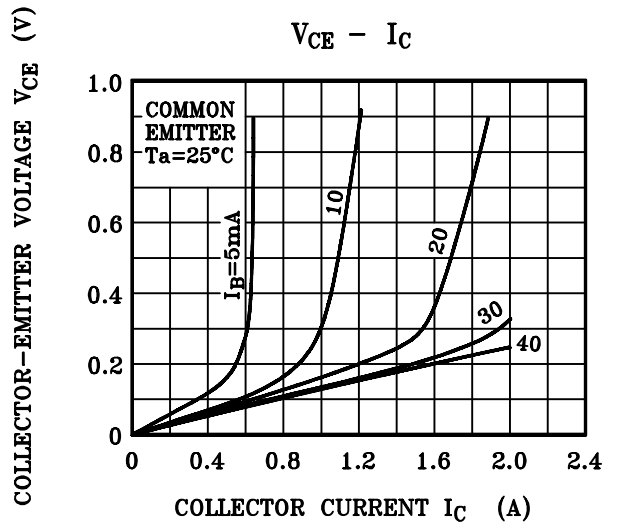
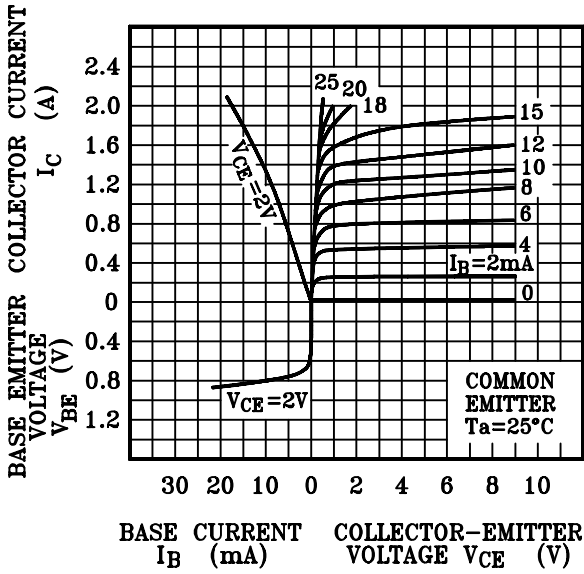
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

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	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=2V, I_C=0.5A$	70	-	240	
	$h_{FE(2)}$ (Note)	$V_{CE}=2V, I_C=1.5A$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.0A, I_B=0.05A$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1.0A, I_B=0.05A$	-	-	1.2	V
Transition Frequency	f_T	$V_{CE}=2V, I_C=0.5A$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	30	-	pF
Switching Time	Turn on Time	t_{on}		0.1	-	μS
	Storage Time	t_{stg}		1.0	-	
	Fall Time	t_f		0.1	-	

$I_{B1} = -I_{B2} = 0.05A$
Duty Cycle $\leq 1\%$

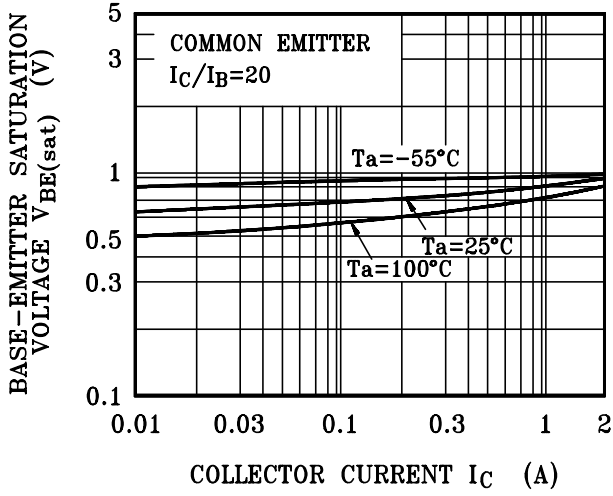
Note : h_{FE} Classification O:70~140, Y:120~240

STATIC CHARACTERISTICS

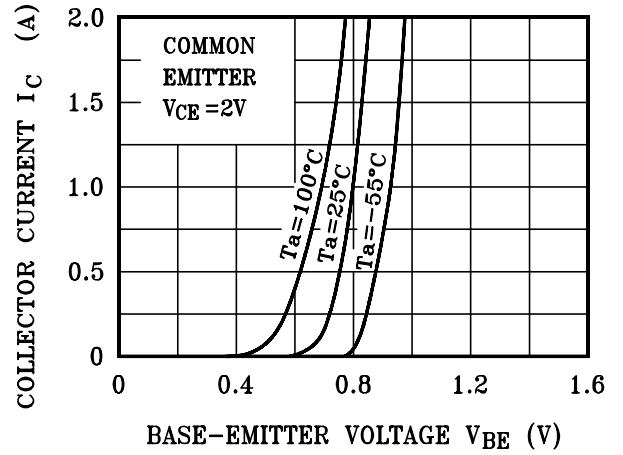


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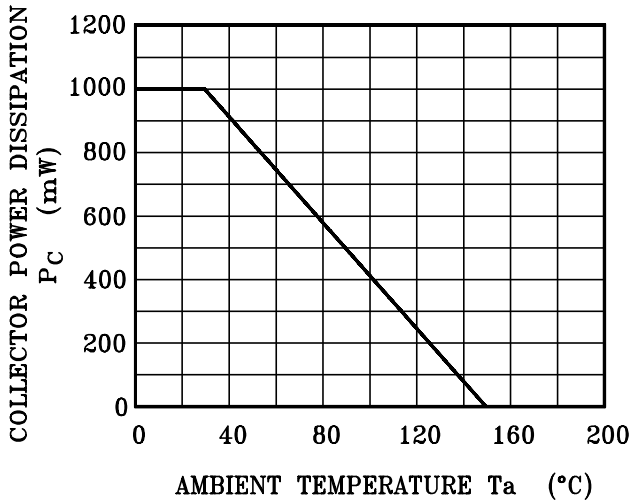
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - T_a$



SAFE OPERATING AREA

