

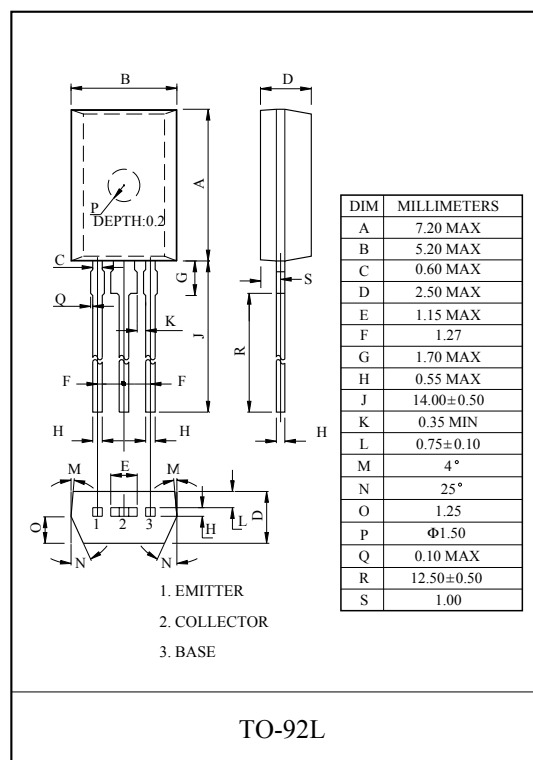
MICRO MOTOR DRIVE, HAMMER DRIVE APPLICATIONS.
POWER SWITCHING APPLICATIONS.
POWER AMPLIFIER APPLICATION.

FEATURES

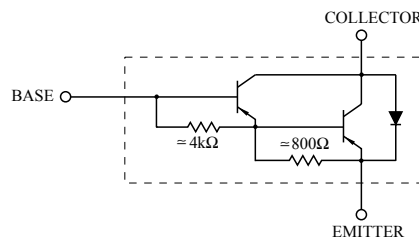
- High DC Current Gain
: $h_{FE}=200(\text{Min.})$ ($V_{CE}=-2V$, $I_C=-1A$)
- Low Saturation Voltage
: $V_{CE(sat)}=-1.5V(\text{Max.})$ ($I_C=-1A$, $I_B=-1mA$)
- Complementary to KTD2854.

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-100	V
Collector-Emitter Voltage		V_{CEO}	-100	V
Emitter-Base Voltage		V_{EBO}	-8	V
Collector Current	DC	I_C	-2	A
	Peak	I_{CP}	-3	
Base Current		I_B	-0.5	A
Collector Power Dissipation		P_C	1	W
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ\text{C}$



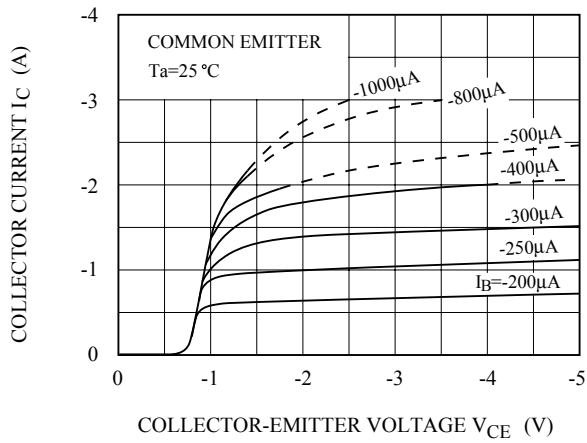
EQUIVALENT CIRCUIT



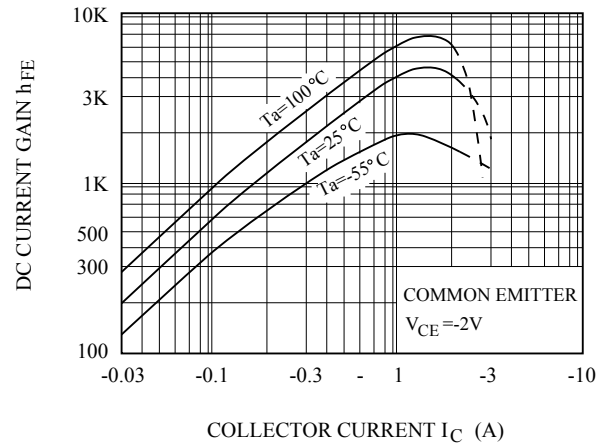
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=-80V$, $I_E=0$	-	-	-10	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=-8V$, $I_C=0$	-	-	-4	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=-10mA$, $I_B=0$	-100	-	-	V
DC Current Gain		h_{FE}	$V_{CE}=-2V$, $I_C=-1A(\text{Pulse})$	2000	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=-1A$, $I_B=-1mA(\text{Pulse})$	-	-	-1.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=-1A$, $I_B=-1mA(\text{Pulse})$	-	-	-2.0	V
Transition Frequency		f_T	$V_{CE}=-2V$, $I_C=-0.5A$	-	50	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$	-	27	-	pF
Switching Time	Turn On Time	t_{on}		-	0.4	-	μS
	Storage Time	t_{stg}		-	2.0	-	
	Fall Time	t_f		-	0.4	-	

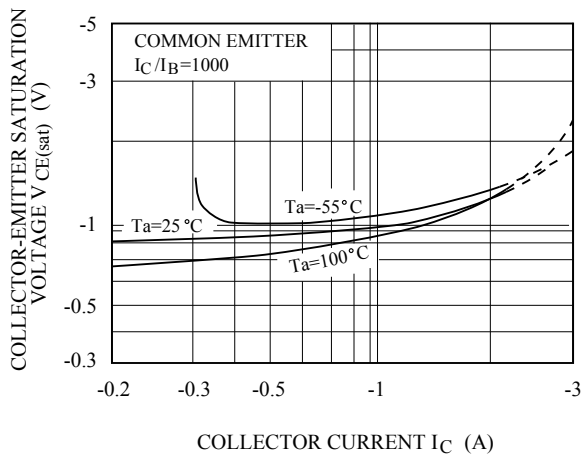
$I_C - V_{CE}$



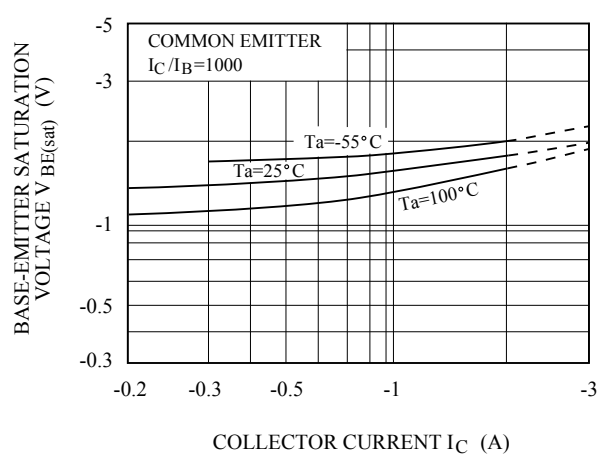
$h_{FE} - I_C$



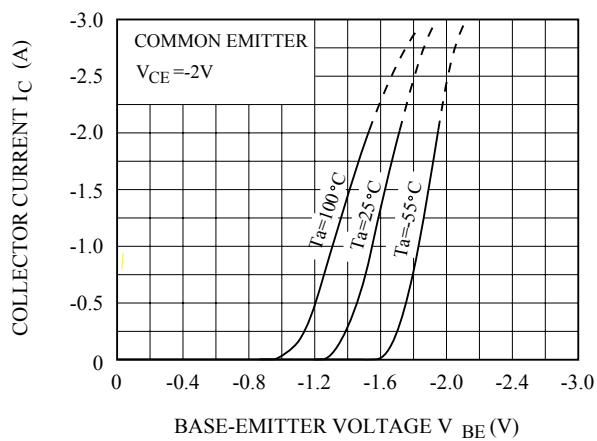
$V_{CE(sat)} - I_C$



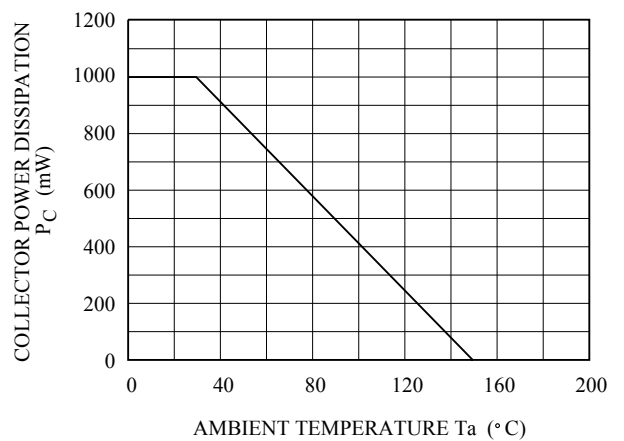
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - T_a$



SAFE OPERATING AREA

