

DRIVER APPLICATIONS.

FEATURES

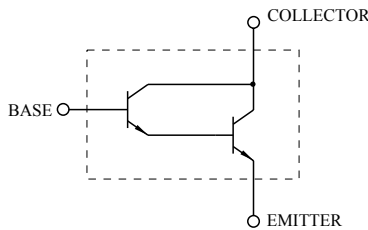
- AF amplifier, solenoid drivers, LED drivers.
- Darlington connection.
- High DC current gain.
- Very small-sized package permitting sets to be made smaller and slimer.
- Complementary to KTB1234T.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	80	V
Collector-Emitter Voltage		V_{CEO}	50	V
Emitter-Base Voltage		V_{EBO}	10	V
Collector Current	DC	I_C	200	mA
	Pulse	I_{CP}	400	
Collector Power Dissipation		P_C^*	0.9	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

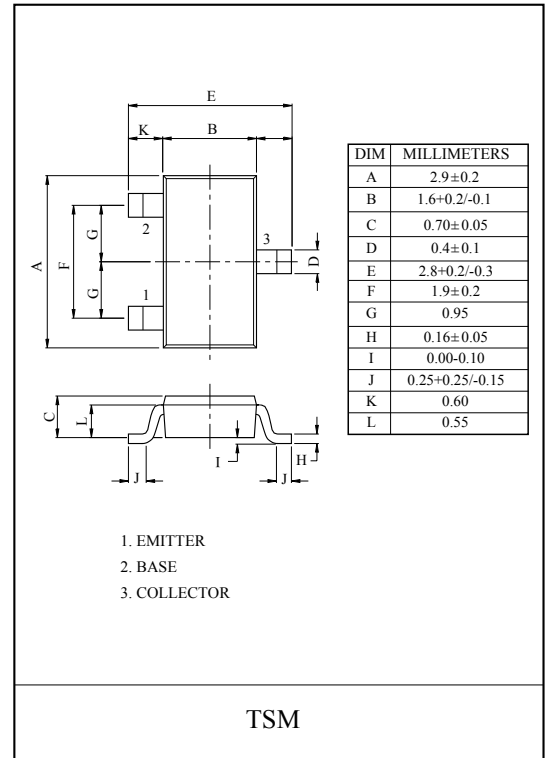
* Package mounted on a ceramic board (600mm² × 0.8mm)

EQUIVALENT CIRCUIT

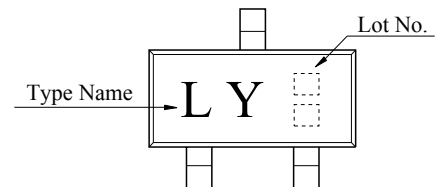


ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$	-	-	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=8V, I_C=0$	-	-	100	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	80			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C=10\mu A, I_C=0$	10			V
DC Current Gain	h_{FE1}	$V_{CE}=2V, I_C=10mA$	5000	-	-	
	h_{FE2}	$V_{CE}=2V, I_C=100mA$	4000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=100\mu A$	-	0.9	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=100\mu A$	-	1.5	2.0	V

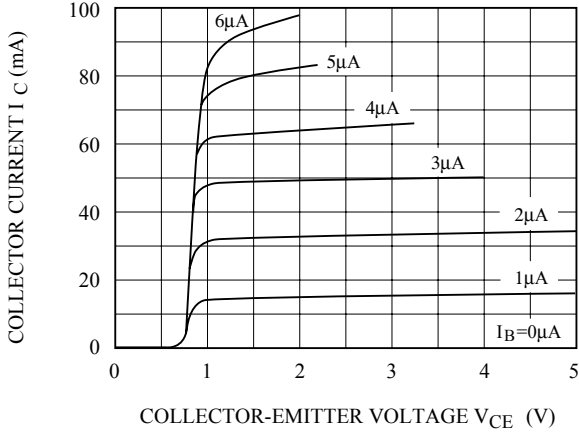


Marking

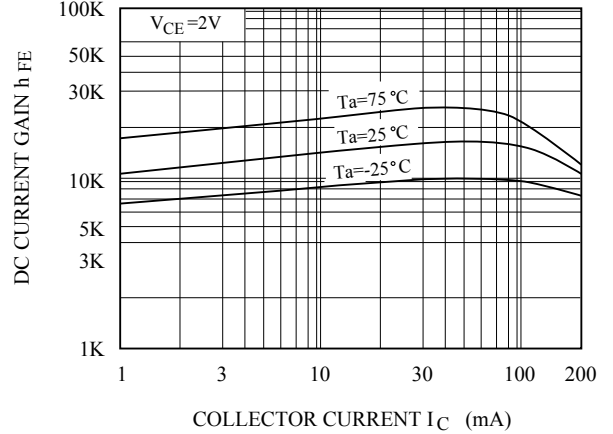


KTD1854T

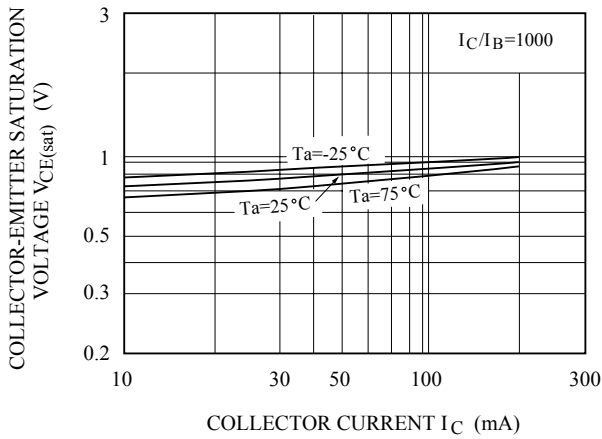
$I_C - V_{CE}$



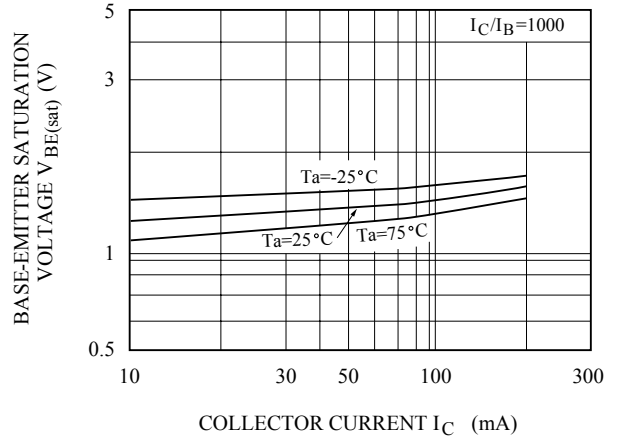
$h_{FE} - I_C$



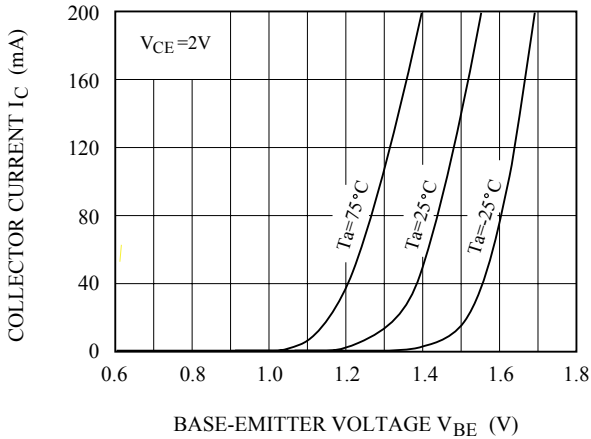
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - T_a$

