

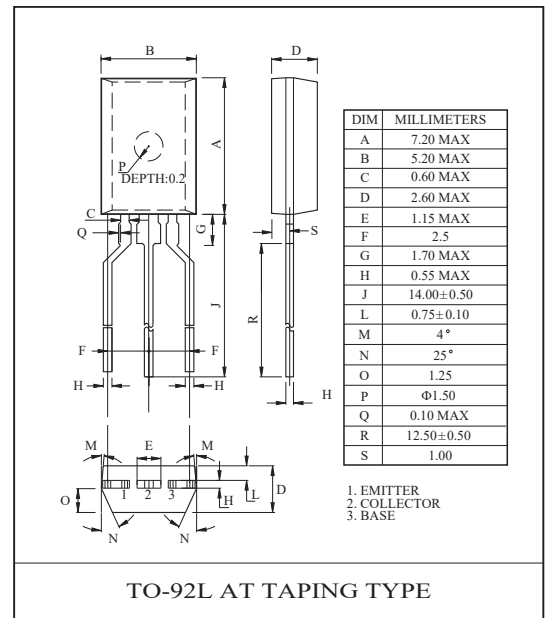
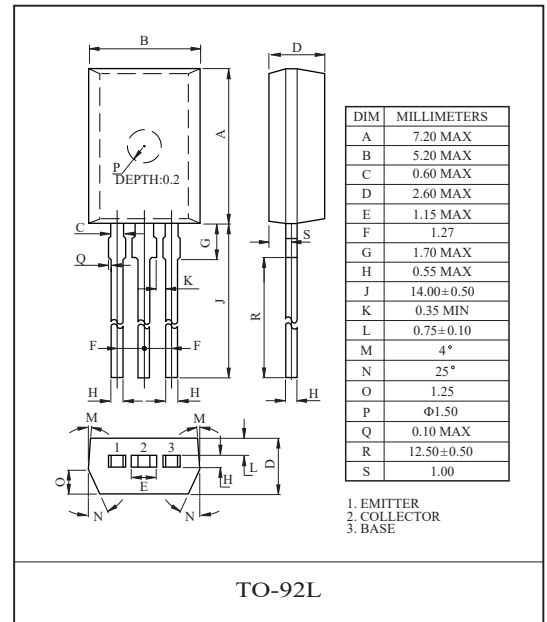
VOLTAGE REGULATOR, RELAY,  
LAMP DRIVER, INDUSTRIAL USE

#### FEATURES

- High Voltage :  $V_{CEO} = -50V(\text{Min.})$ .
- High Current :  $I_C(\text{Max.}) = -1A$ .
- High Transition Frequency :  $f_T = 150\text{MHz}(\text{Typ.})$ .
- Wide Area of Safe Operation.
- Complementary to KTD863.

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	-60	V
Collector-Emitter Voltage		$V_{CEO}$	-50	V
Emitter-Base Voltage		$V_{EBO}$	-5	V
Collector Current	DC	$I_C$	-1	A
	Pulse	$I_{CP}$	-2	
Collector Power Dissipation		$P_C$	1	W
Junction Temperature		$T_j$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



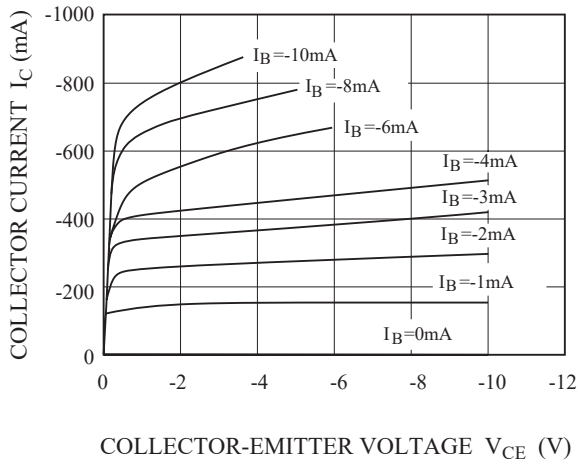
#### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -50V, I_E = 0$	-	-	-1	$\mu\text{A}$
Collector Cut-off Current	$I_{CEO}$	$V_{CE} = -50V, I_B = 0$	-	-	-1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$	-	-	-1	$\mu\text{A}$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2V, I_C = -50\text{mA}$	60	-	320	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -1A$	30	-	-	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-50	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.2	-0.7	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.85	-1.2	V
Transition Frequency	$f_T$	$V_{CE} = -10V, I_C = -50\text{mA}$	-	150	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1\text{MHz}$	-	20	-	pF

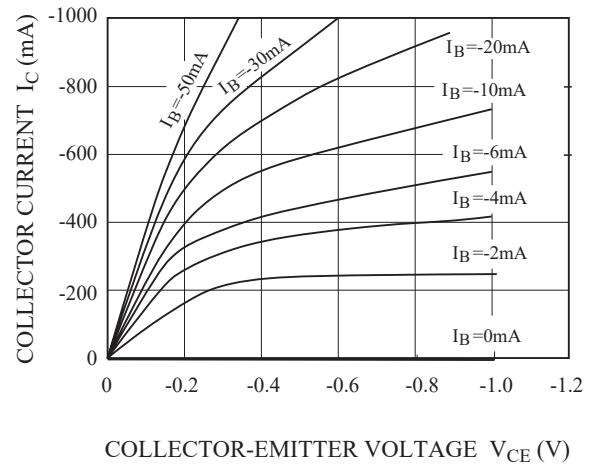
Note :  $h_{FE(1)}$  Classification O:60~120, Y:100~200, GR:160~320

# KTB764

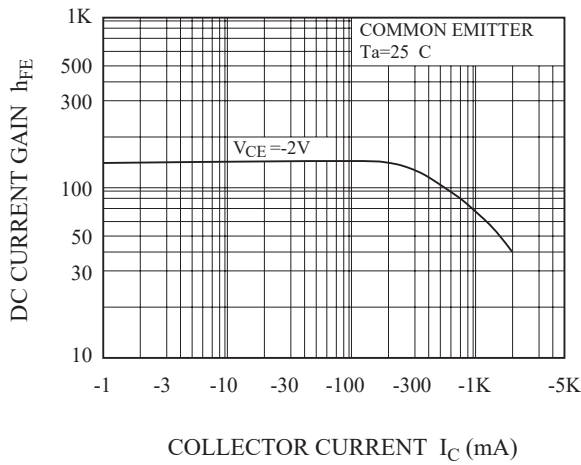
$I_C - V_{CE}$



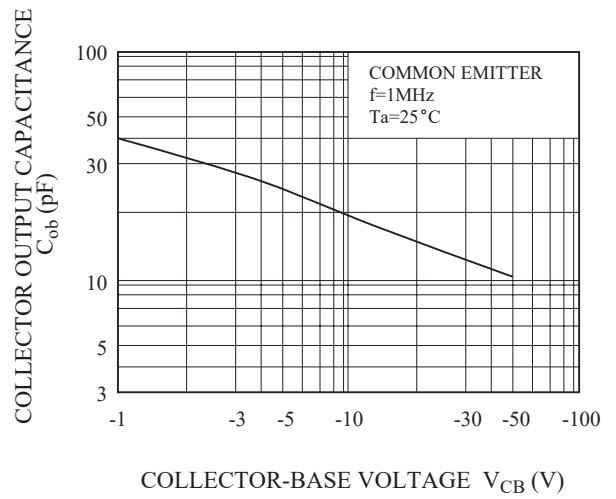
$I_C - V_{CE}$



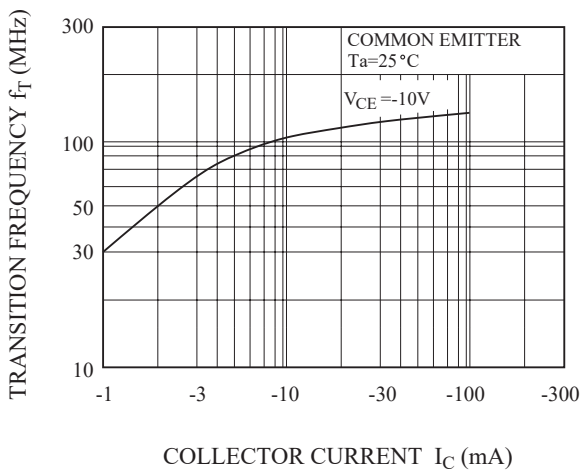
$h_{FE} - I_C$



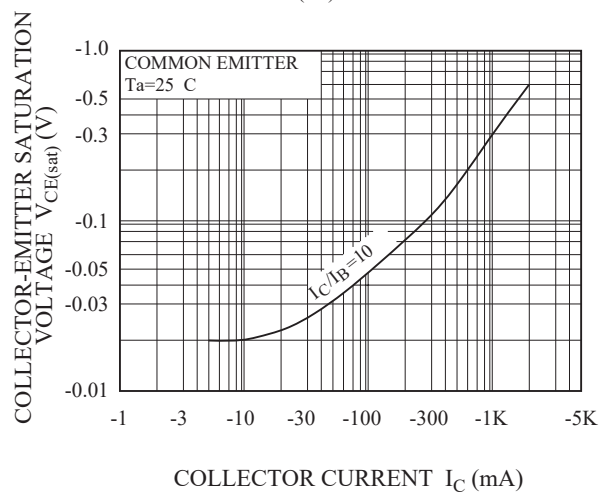
$C_{ob} - V_{CB}$



$f_T - I_C$

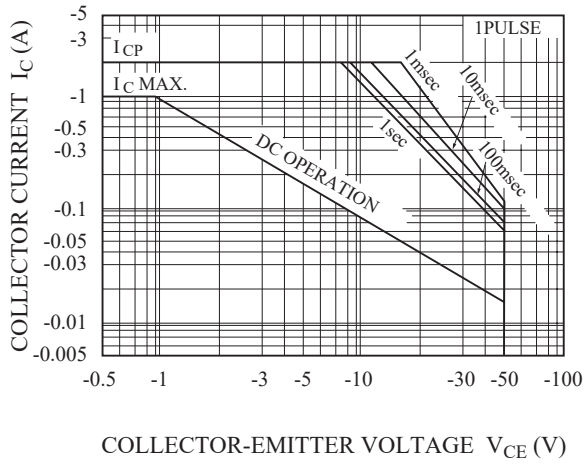


$V_{CE(sat)} - I_C$



# KTB764

SAFE OPERATING AREA



Pc - Ta

