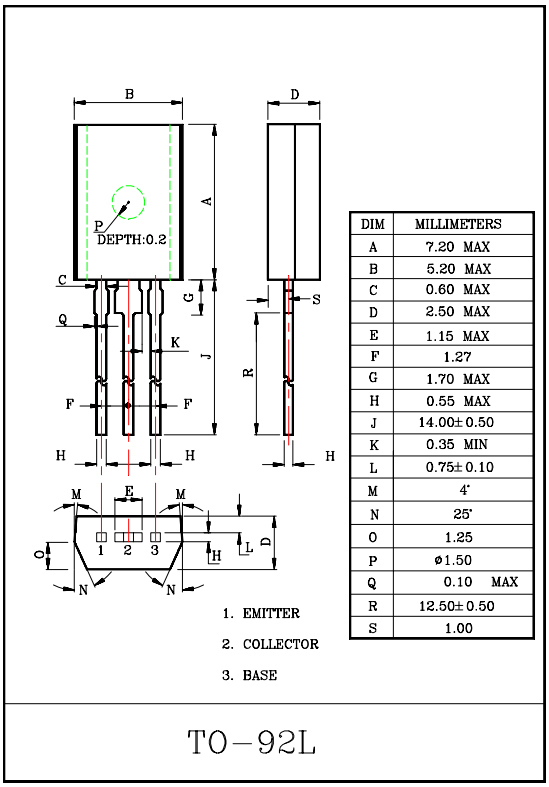
KTC3226

EPITAXIAL PLANAR NPN TRANSISTOR

STROBO FLASH APPLICATION.
HIGH CURRENT APLICATION.

FEATURES

- High DC Current Gain and Excellent h_{FE} Linearity
  : $h_{FE}(1)$=140～600 (V_{CE}=1V, I_C=0.5A)
  : $h_{FE}(2)$=70(Min.), 200(Typ.) (V_{CE}=1V, I_C=2A).
- Low Saturation Voltage
  : $V_{CE(sat)}$=0.5V(Max.) (I_C=2A, I_B=50mA).



DIM	MILLIMETERS
A	7.20 MAX
B	5.20 MAX
C	0.60 MAX
D	2.50 MAX
E	1.15 MAX
F	1.27
G	1.70 MAX
H	0.55 MAX
J	14.00±0.50
K	0.35 MIN
L	0.75±0.10
M	4°
N	25°
O	1.25
P	ø1.50
Q	0.10 MAX
R	12.50±0.50
S	1.00

TO-92L

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	30	V
Collector Emitter Voltage		V_{CES}	30	V
		V_{CEO}	10	
Emitter Base Voltage		V_{EBO}	6	V
Collector Current	DC	I_C	2	A
	Pulse (Note1)	I_{CP}	5	
Base Current		I_B	2	A
Collector Power Dissipation		P_C	1	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55～150	℃

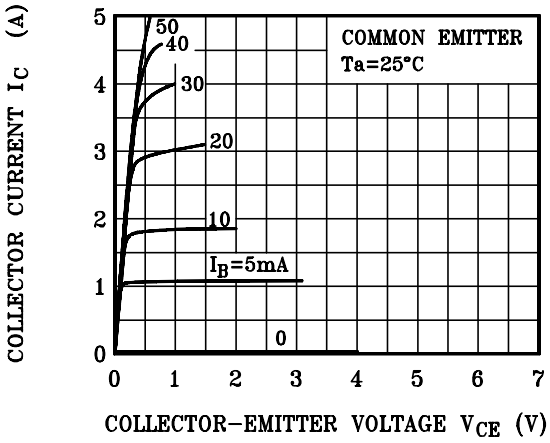
Note 1 : Pulse Width≦10ms, Duty Cycle≦30%

ELECTRICAL CHARACTERISTICS (Ta=25℃)

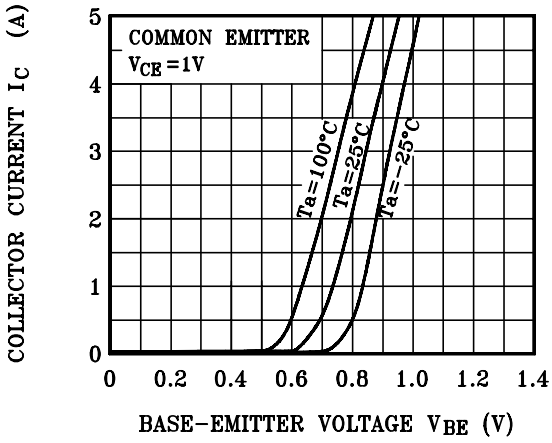
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0	-	-	100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=6V, I_C=0	-	-	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	10	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-1mA, I_C=0	6	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note 2)	V_{CE}=1V, I_C=0.5A	140	-	600	
	$h_{FE}(2)$	V_{CE}=1V, I_C=2A	70	200	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2A, I_B=50mA	-	0.2	0.5	V
Base-Emitter Voltage	V_{BE}	V_{CE}=1V, I_C=2A	-	0.86	1.5	V
Transition Frequency	f_T	V_{CE}=1V, I_C=0.5A	-	150	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	27	-	pF

Note 2 : $h_{FE}(1)$ Classification A:140～240, B:200～330, C:300～450, D:420～600

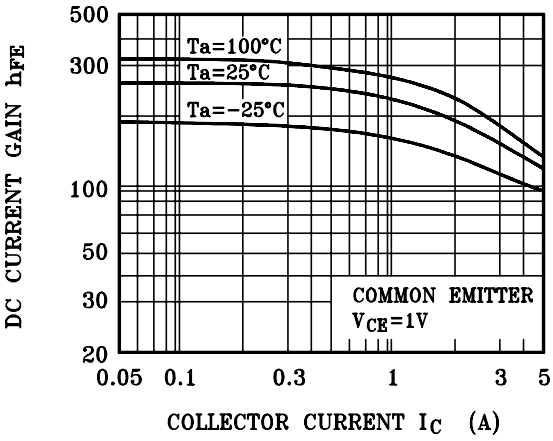
I_C – V_{CE}



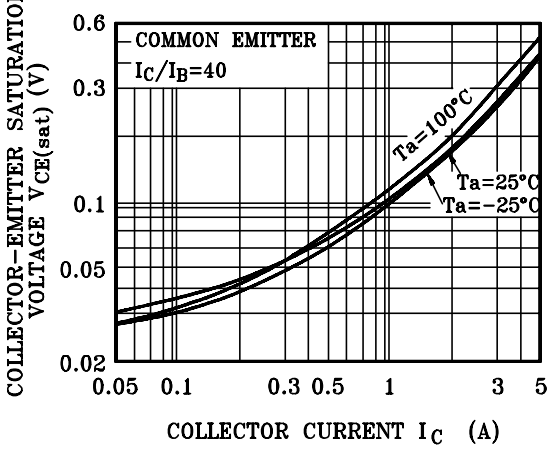
I_C – V_{BE}



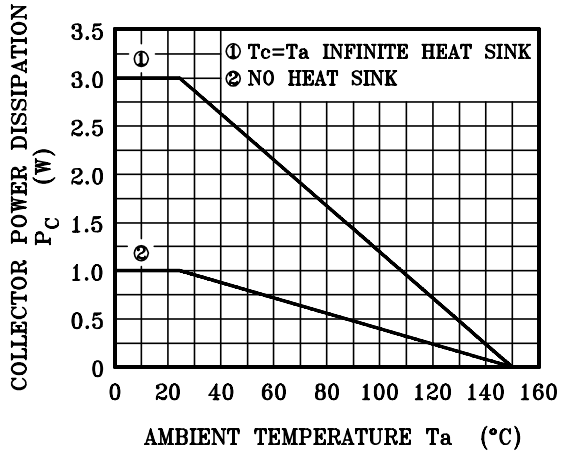
h_{FE} – I_C



$V_{CE(sat)}$ – I_C



P_C – Ta



SAFE OPERATING AREA