KN4402/4403

EPITAXIAL PLANAR PNP TRANSISTOR

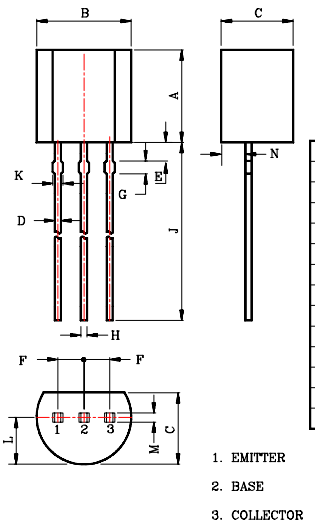
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURE

- Complementary to KN4400/4401.

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-600	mA
Collector Power Dissipation (Ta=25℃)	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~150	℃



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.45
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00± 0.50
K	0.55 MAX
L	2.30
M	0.45 MAX
N	1.00

1. EMITTER
2. BASE
3. COLLECTOR

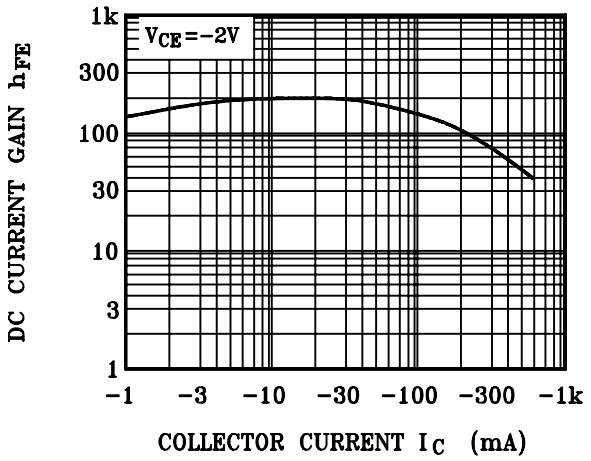
TO-92

ELECTRICAL CHARACTERISTICS (Ta=25℃)

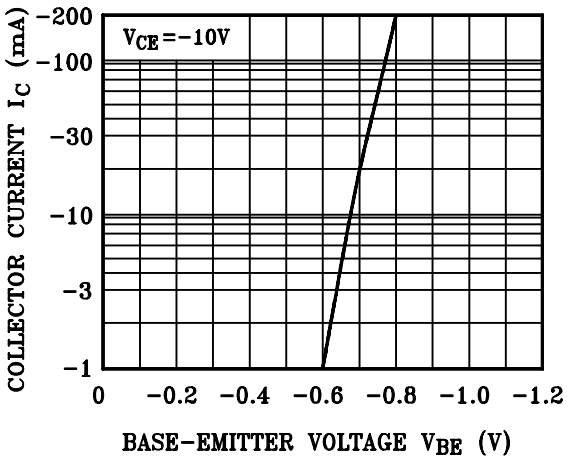
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CEX}	V_{CE}=-35V, V_{EB}=-0.4V	-	-	-100	nA
Collector Cut-off Current		I_{CBO}	V_{CB}=-40V, I_E=0	-	-	-100	nA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	I_C=-100μA, I_E=0	-40	-	-	V
Collector-Emitter Breakdown Voltage *		$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-40	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5	-	-	V
DC Current Gain *	KN4403	h_{FE}(1)	V_{CE}=-1V, I_C=-0.1mA	30	-	-	
	KN4402	h_{FE}(1)	V_{CE}=-1V, I_C=-1mA	30	-	-	
	KN4403	h_{FE}(2)		60	-	-	
	KN4402	h_{FE}(2)	V_{CE}=-1V, I_C=-10mA	50	-	-	
	KN4403	h_{FE}(3)		100	-	-	
	KN4402	h_{FE}(3)	V_{CE}=-2V, I_C=-150mA	50	-	150	
	KN4403	h_{FE}(4)		100	-	300	
	KN4402	h_{FE}(4)	V_{CE}=-2V, I_C=-500mA	20	-	-	
	KN4403	h_{FE}(5)		20	-	-	
Collector-Emitter Saturation Voltage *		$V_{CE(sat)}$1	I_C=-150mA, I_B=-15mA	-	-	-0.4	V
		$V_{CE(sat)}$2	I_C=-500mA, I_B=-50mA	-	-	-0.75	
Base-Emitter Saturation Voltage *		$V_{BE(sat)}$1	I_C=-150mA, I_B=-15mA	-0.75	-	-0.95	V
		$V_{BE(sat)}$2	I_C=-500mA, I_B=-50mA	-	-	-1.3	
Transition Frequency		f_T	V_{CE}=-10V, I_C=-20mA f=100MHz	200	-	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	-	8.5	pF

Note : *Pulse Test : Pulse Width ≤300μS, Duty Cycle≤2.0%.

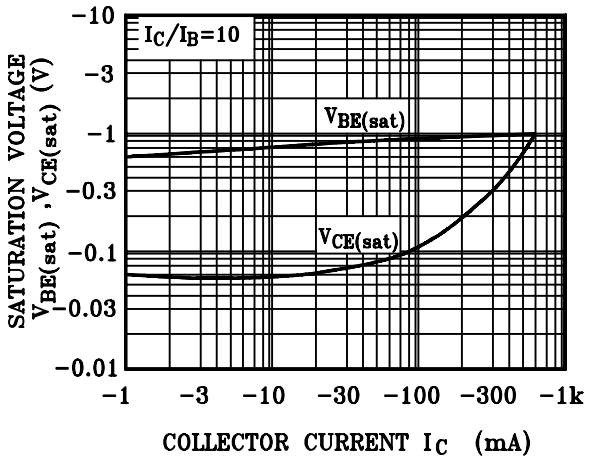
h_{FE} - I_C



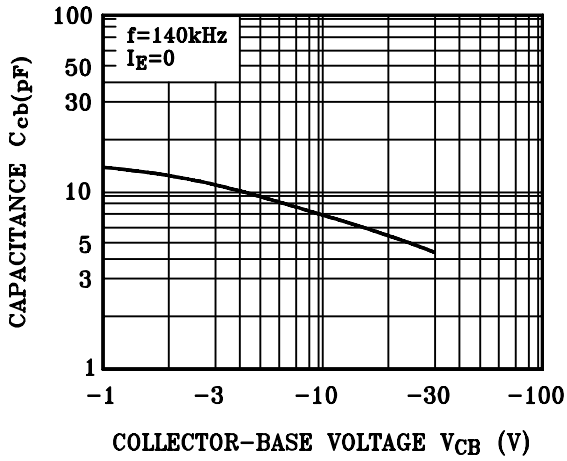
I_C - V_{BE}



$V_{BE(sat)}$, $V_{CE(sat)}$ - I_C



C_{cb} - V_{CB}



P_C - Ta