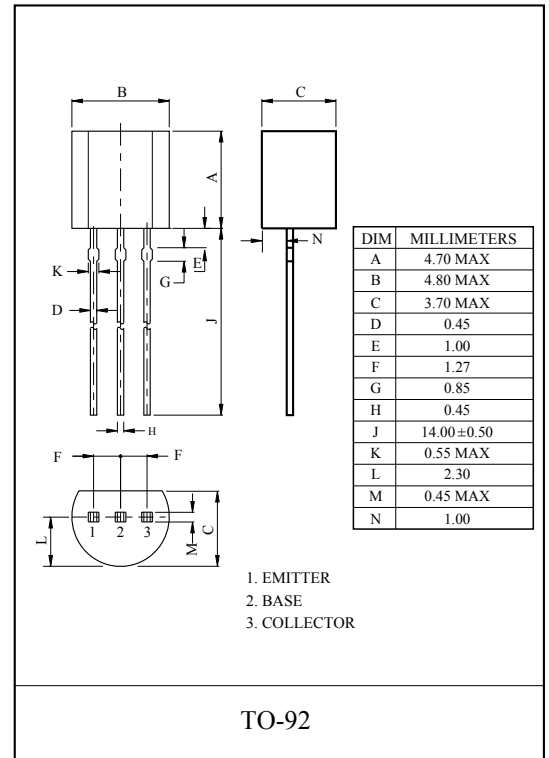


GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

· Complementary to KN4400/4401.

MAXIMUM RATING (Ta=25°C)

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	P_C	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C



KN4402/4403

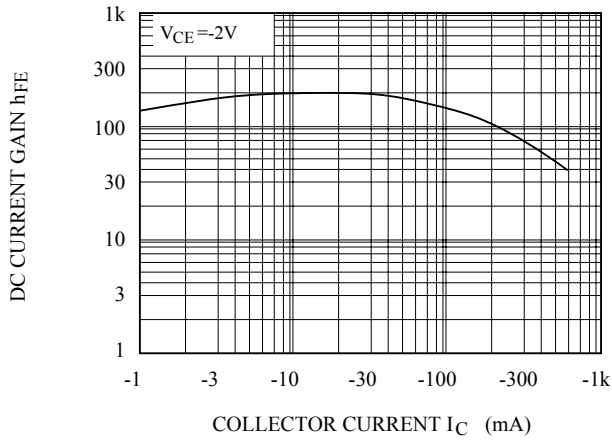
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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		$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-40	-	-	V
Collector-Emitter Breakdown Voltage *		$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-40	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-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

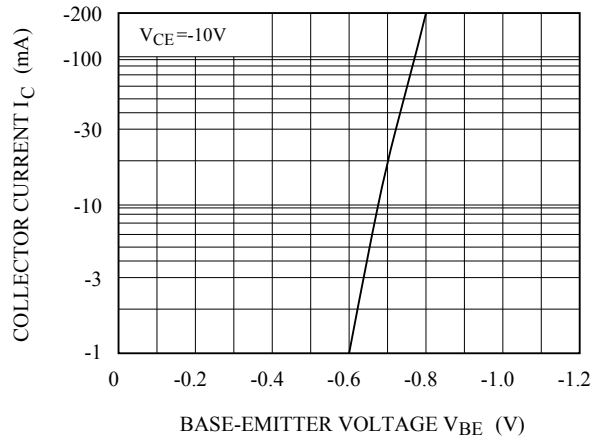
* Pulse Test : Pulse Width $\leq 300\mu S$, Duty Cycle $\leq 2\%$.

KN4402/4403

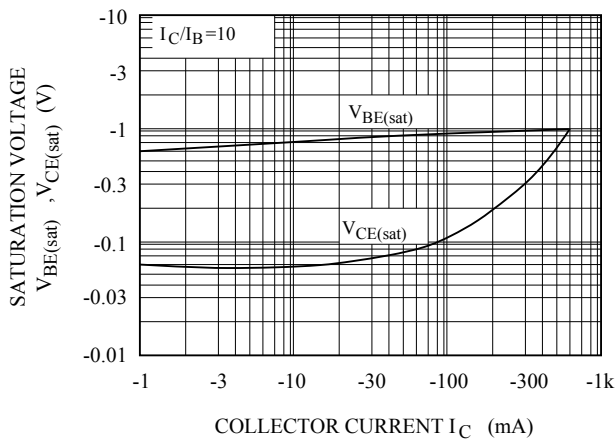
$h_{FE} - I_C$



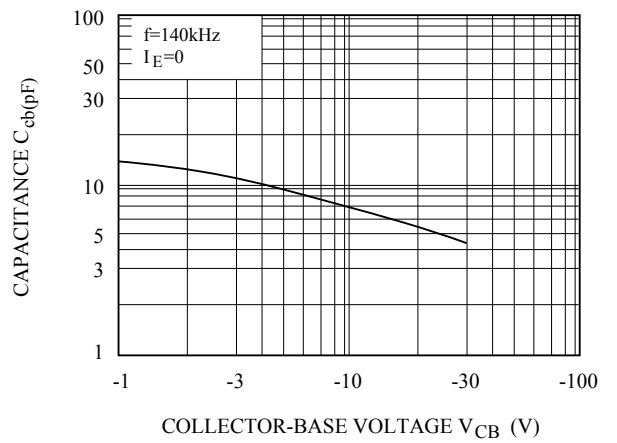
$I_C - V_{BE}$



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



$C_{cb} - V_{CB}$



$P_c - T_a$

