

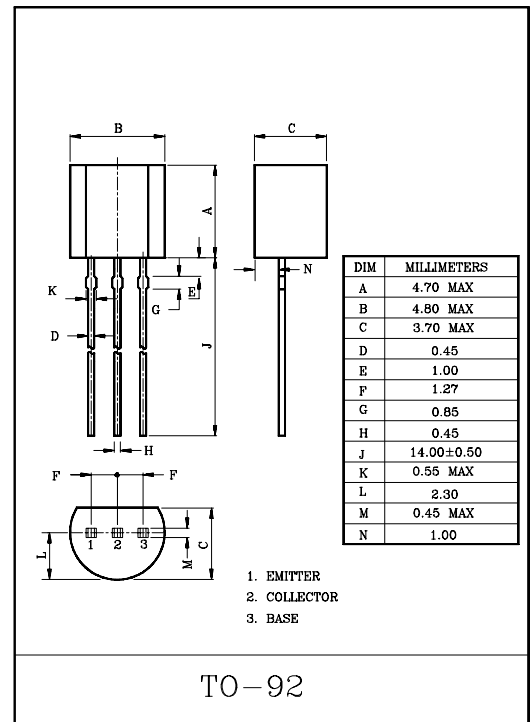
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

#### FEATURES

- Excellent  $h_{FE}$  Linearity  
 :  $h_{FE(2)}=80(\text{Typ.})$  at  $V_{CE}=-6V, I_C=-150mA$   
 :  $h_{FE(I_C=0.1mA)}/h_{FE(I_C=2mA)}=0.95(\text{Typ.})$ .
- Low Noise :  $NF=1dB(\text{Typ.})$ , at  $f=1kHz$ .
- Complementary to KTC3198.

#### MAXIMUM RATINGS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-150	mA
Base Current	$I_B$	-50	mA
Collector Power Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-50V, I_E=0$	-	-	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-6V, I_C=-2mA$	70	-	400	
	$h_{FE(2)}$	$V_{CE}=-6V, I_C=-150mA$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-	-1.1	V
Transition Frequency	$f_T$	$V_{CE}=-10V, I_E=1mA$	80	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$	-	4.0	7.0	pF
Base Intrinsic Resistance	$r_{bb'}$	$V_{CB}=-10V, I_E=1mA, f=30MHz$	-	30	-	$\Omega$
Noise Figure	NF	$V_{CE}=-6V, I_C=-0.1mA$ $R_g=10k\Omega, f=1kHz$	-	1.0	10	dB

Note :  $h_{FE(1)}$  Classification O:70~140, Y:120~240, GR:200~400

# KTA1266

