

# SEMICONDUCTOR TECHNICAL DATA

# KTC9015 EPITAXIAL PLANAR PNP TRANSISTOR

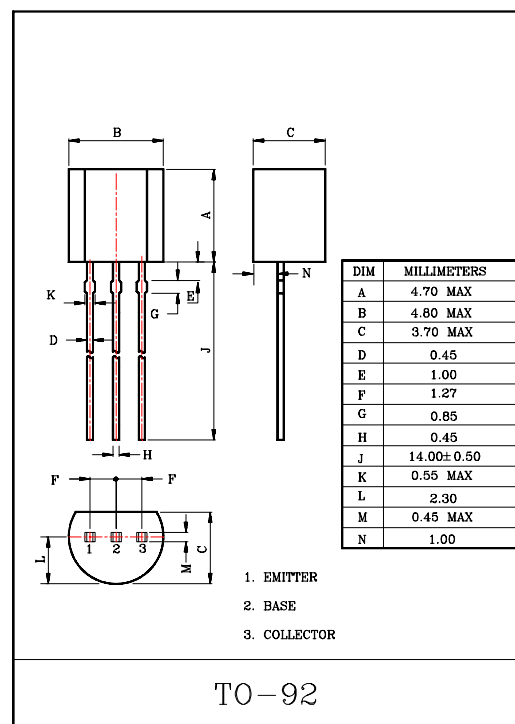
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

## FEATURES

- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$ (Typ.).
- Low Noise :NF=1dB(Typ.) at f=1kHz.
- Complementary to KTC9014.

## MAXIMUM RATINGS (Ta=25°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
Emitter Current	$I_E$	150	mA
Collector Power Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{sig}$	-55~150	°C



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-50V, I_E=0$	-	-	-50	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-100	nA
DC Current Gain	$h_{FE}$ (Note)	$V_{CE}=-5V, I_C=-1mA$	60	-	600	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.3	V
Transition Frequency	$f_T$	$V_{CE}=-10V, I_E=1mA, f=100MHz$	60	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$	-	4.0	7.0	pF
Noise Figure	NF	$V_{CE}=-6V, I_C=-0.1mA, R_g=10k\Omega, f=1kHz$	-	1.0	10	dB

Note :  $h_{FE}$  Classification    A:60~150 ,    B:100~300 ,    C:200~600