

### SEMICONDUCTOR TECHNICAL DATA

# KTC9015 EPITAXIAL PLANAR PNP TRANSISTOR

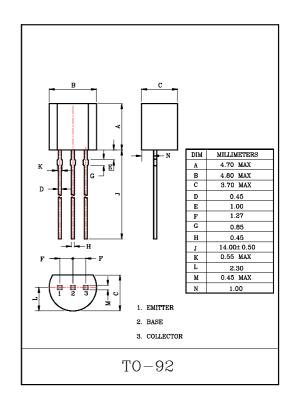
## GENERAL PURPOSE APPLICATION. SWITCHING APPLICATION.

#### **FEATURES**

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

#### MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	V <sub>CBO</sub>	-50	V	
Collector-Emitter Voltage	$V_{CEO}$	-50	V	
Emitter-Base Voltage	$V_{\rm EBO}$	-5	V	
Collector Current	$I_{\rm C}$	-150	mA	
Emitter Current	$ m I_E$	150	mA	
Collector Power Dissipation	$P_{C}$	625	mW	
Junction Temperature	$T_{j}$	150	${\mathbb C}$	
Storage Temperature Range	$T_{\text{stg}}$	-55~150	${\mathbb C}$	



#### 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	$I_{\mathrm{EBO}}$	$V_{EB}$ =-5V, $I_{C}$ =0	-	-	-100	nA
DC Current Gain	h <sub>FE</sub> (Note)	$V_{CE}$ =-5 $V$ , $I_{C}$ =-1 $mA$	60	-	600	-
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	$I_{C}$ =-100mA, $I_{B}$ =-10mA	-	-0.1	-0.3	V
Transition Frequency	$ m f_{T}$	$V_{CE}$ =-10V, $I_{E}$ =1mA, f=100MHz	60	_	-	MHz
Collector Output Capacitance	Cob	$V_{CB}$ =-10V, $I_{E}$ =0, f=1MHz	-	4.0	7.0	pF
Noise Figure	NF	$V_{CE}$ =-6V, $I_{C}$ =-0.1mA, $Rg$ =10k $\Omega$ , $f$ =1kHz	-	1.0	10	dB

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