

KEC

KOREA ELECTRONICS CO.,LTD.

**SEMICONDUCTOR
TECHNICAL DATA****KTA1268**

EPITAXIAL PLANAR PNP TRANSISTOR

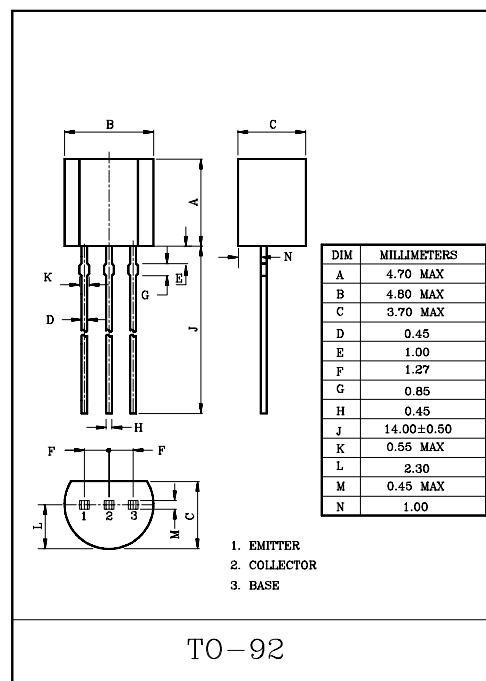
LOW NOISE AMPLIFIER APPLICATION.
HIGH VOLTAGE APPLICATION.

FEATURES

- Low Noise.
: NF=3dB(Typ.), $R_g=100\Omega$, $V_{CE}=-6V$, $I_C=-100\mu A$, $f=1kHz$
: NF=0.5dB(Typ.), $R_g=1k\Omega$, $V_{CE}=-6V$, $I_C=-100\mu A$, $f=1kHz$.
- High DC Current Gain : $h_{FE}=200\sim 700$.
- High Voltage : $V_{CEO}=-120V$.
- Low Pulse Noise. Low 1/f Noise.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Emitter Current	I_E	100	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}	$V_{CB}=-120V$, $I_E=0$	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$	-	-	-100	nA
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C=-1mA$, $I_B=0$	-120	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=-6V$, $I_C=-2mA$	200	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-10mA$, $I_B=-1mA$	-	-	-0.3	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-6V$, $I_C=-2mA$	-	-0.65	-	V
Transition Frequency	f_T	$V_{CE}=-6V$, $I_C=-1mA$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$	-	4.0	-	pF
Noise Figure	NF	$V_{CE}=-6V$, $I_C=-100\mu A$ $f=10Hz$, $R_g=10k\Omega$	-	-	6.0	dB
		$V_{CE}=-6V$, $I_C=-100\mu A$, $f=1kHz$, $R_g=10k\Omega$	-	-	2.0	
		$V_{CE}=-6V$, $I_C=-100\mu A$ $f=1kHz$, $R_g=100\Omega$	-	3.0	-	

Note : h_{FE} Classification GR:200~400, BL:350~700

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