Transistors 2SC9014

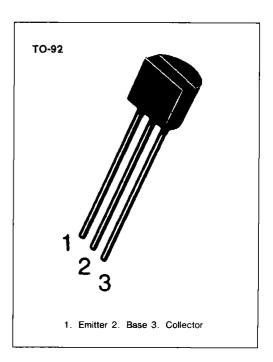


PRE-AMPLIFIER, LOW LEVEL & LOW NOISE

- High total power dissipation. (PT=450mW)
- High hFE and good linearity
- Complementary to SS9015

ABSOLUTE MAXIMUM RATINGS $(T_a = 25$ °C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{C8O}	50	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	Ic	100	mA
Collector Dissipation	Pc	450	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~150	°C



ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

Characteristic	Symbol	Test Conditions	Min	Тур	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100μA, I _E =0	50			v
Collector-Emitter Breakdown Voltage	BV _{CEO}	$I_C=1$ mA, $I_B=0$	45			V
Emitter-Base Breakdown Voltage	BV _{EBO}	$I_E = 100 \mu A$, $I_C = 0$	5			l v
Collector Cutoff Current	ICBO	V _{CB} =50V, I _E =0			50	nA
Emitter Cutoff Current	IEBO	V _{EB} =5V, I _C =0			50	nA
DC Current Gain	h _{FE}	$V_{CE}=5V$, $I_{C}=1$ mA	60	280	1000	
Collector-Base Saturation Voltage	V _{CE} (sat)	$I_{C} = 100 \text{mA}$. $I_{B} = 5 \text{mA}$		0.14	0.3	l v
Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C =100mA, I _B =5mA		0.84	1.0	V
Base-Emitter On Voltage	V _{BE} (on)	V _{CE} =5V, I _C =2mA	0.58	0.63	0.7	l v
Output Capacitance	Cob	V _{CB} =10V, I _E =0 f=1MHz		2.2	3.5	pF
Current Gain-Bandwidth Product	fτ	V _{CF} =5V, I _C =10mA	150	270		MHz
Noise Figure	NF	V_{CE} =5V, I_{C} =0.2mA f=1KHz, R_{S} =2K Ω		0.9	10	dB

h_{FE} CLASSIFICATION

Classification	A	В	С	D
h _{FE}	60-150	100-300	200-600	400-1000



