

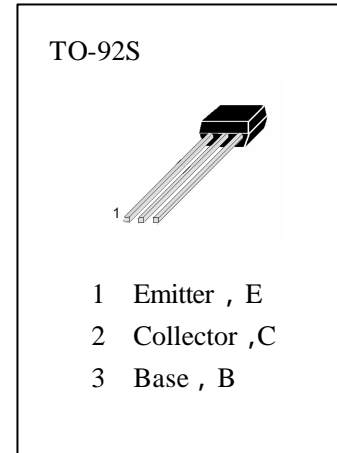


**APPLICATIONS**

Amplifier And Speed Switching .

**ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )**

- $T_{stg}$ —Storage Temperature..... -55~150
- $T_j$ —Junction Temperature.....150
- $P_C$ —Collector Dissipation.....250mW
- $V_{CBO}$ —Collector-Base Voltage.....60V
- $V_{CEO}$ —Collector-Emitter Voltage.....50V
- $V_{EBO}$ —Emitter-Base Voltage.....5V
- $I_C$ —Collector Current.....100mA



**ELECTRICAL CHARACTERISTICS (  $T_a=25$  )**

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	50			V	$I_C=1\text{mA}, I_B=0$
$I_{CBO}$	Collector Cut-off Current			0.1	$\mu\text{A}$	$V_{CB}=60\text{V}, I_E=0$
$I_{EBO}$	Emitter Cut-off Current			0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
$H_{FE}(1)$	DC Current Gain	50	185			$V_{CE}=6\text{V}, I_C=0.1\text{mA}$
$H_{FE}(2)$	DC Current Gain	110	200	600		$V_{CE}=6\text{V}, I_C=1\text{mA}$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		0.15	0.3	V	$I_C=100\text{mA}, I_B=10\text{mA}$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		0.86	1	V	$I_C=100\text{mA}, I_B=10\text{mA}$
$V_{BE}$	Base-Emitter Voltage	0.55	0.62	0.65	V	$V_{CE}=6\text{V}, I_C=1\text{mA}$
$f_T$	Current Gain-Bandwidth Product	150	250	450	MHz	$V_{CE}=6\text{V}, I_C=10\text{mA}$
$C_{ob}$	Output Capacitance		3	4	pF	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$

**$h_{FE}$  Classification**

R	J	H	F	E	K
110—180	135—220	170—270	200—320	250—400	300—600