

## isc Silicon PNP Transistor

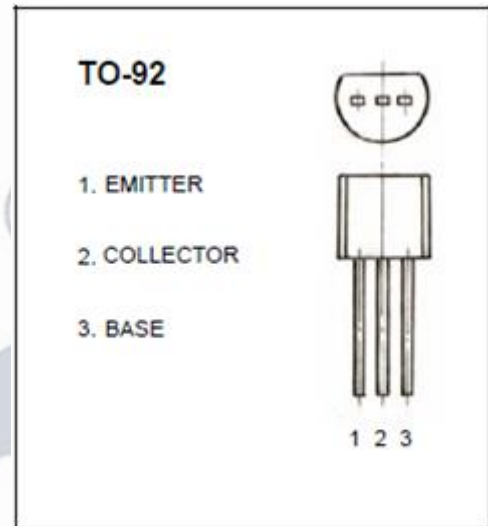
2SA1015

**DESCRIPTION**

- High Voltage and High Current  
 $V_{ce0}=-50V(\text{Min.})$ ,  $I_c=-150mA(\text{Max})$
- Excellent hFE Linearity
- Low Noise
- Complement to Type 2SC1815

**APPLICATIONS**

- Audio frequency general purpose amplifier Applications
- Driver stage amplifier applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_c$	Collector Current	-150	mA
$I_B$	Base Current	-50	mA
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	400	mW
$T_J$	Junction Temperature	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~125	$^\circ\text{C}$

## isc Silicon PNP Transistor

## 2SA1015

## ELECTRICAL CHARACTERISTICS

 $T_c=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -100\text{mA}$ ; $I_B = -10\text{mA}$			-0.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -100\text{mA}$ ; $I_B = -10\text{mA}$			-1.1	V
$I_{CBO}$	Emitter Cutoff Current	$V_{CB} = -50\text{V}$ ; $I_E = 0$			-0.1	$\mu\text{A}$
$I_{EBO}$	Collector Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$			-0.1	$\mu\text{A}$
$h_{FE(1)}$	DC Current Gain	$I_C = -2\text{mA}$ ; $V_{CE} = -6\text{V}$	70		400	
$h_{FE(2)}$	DC Current Gain	$I_C = -150\text{mA}$ ; $V_{CE} = -6\text{V}$	25			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{mA}$ ; $V_{CE} = -10\text{V}$ ;	80			MHz
Cob	Collector Output Capacitance	$V_{CB} = -10\text{V}$ ; $I_E = 0$ ; $f = 1\text{MHz}$			7	pF
NF	Noise Figure	$V_{CE} = -6\text{V}$ , $I_C = -0.1\text{mA}$ ; $f = 1\text{KHz}$ , $R_G = 10\text{K}\Omega$			10	dB

◆  $h_{FE(1)}$  Classifications

O	Y	GR
70-140	120-240	200-400