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## Silicon NPN Power Transistor

## 2SC3272

### DESCRIPTION

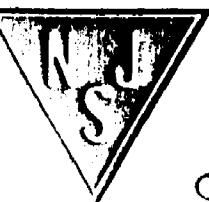
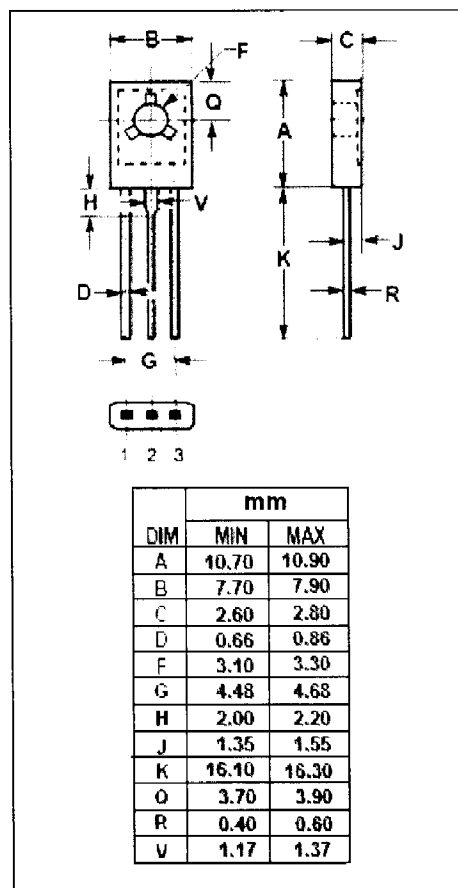
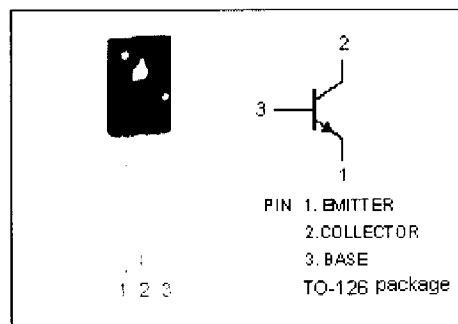
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 300V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Low Saturation Voltage

### APPLICATIONS

- Designed for use in color TV chroma output and video signal amplification.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	0.1	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	5	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

**Quality Semi-Conductors**

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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=50\ \mu\text{A}; I_E=0$	300			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=100\ \mu\text{A}; I_B=0$	300			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=50\ \mu\text{A}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=200\text{V}; I_E=0$			0.5	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$			0.5	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=10\text{mA}; V_{CE}=10\text{V}$	39		180	
$f_T$	Current-Gain—Bandwidth Product	$I_E=-10\text{mA}; V_{CE}=30\text{V}$	50			MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=30\text{V}; f_{\text{test}}=1\text{MHz}$		3		pF

◆  $h_{FE}$  Classifications

M	N	P
39-82	56-120	82-180