

isc Silicon NPN Transistor

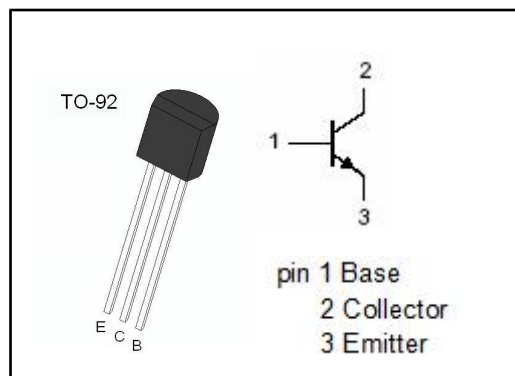
2SC828

FEATURES

- TO-92 Through-Hole Package
- Wide hFE Range
- Epitaxial Planar Structure

APPLICATIONS

- Sensor Signal Processing
- Low-Level Driver Circuits
- AF Signal Amplification

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	50	mA
I_{CP}	Collector Current-Pulse	100	mA
P_C	Collector Power Dissipation	400	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

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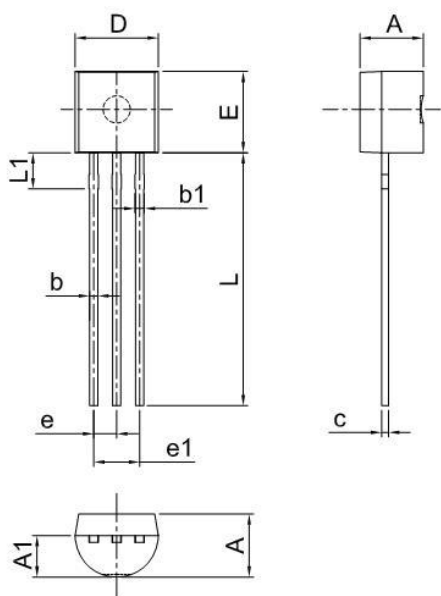
ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV_{CBO}	Collector-base breakdown voltage	$I_C=10\mu\text{A}$	30	--	V
BV_{CEO}	Collector-emitter breakdown voltage	$I_C=2\text{mA}$	25	--	V
BV_{EBO}	Emitter-base breakdown voltage	$I_E=10\mu\text{A}$	7.0	--	V
$V_{BE(on)}$	Base-emitter on voltage	$I_C=10\text{mA}, V_{CE}=5\text{V}$	--	0.8	V
h_{FE}^*	DC current transfer ratio	$V_{CE}=5\text{V}, I_C=2\text{mA}$	130	520	--

hFE classification

Q	R	S
130-280	180-360	260-520

PACKAGE OUTLINE DIMENSIONS IN MM



Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
A1	2.30	2.70	0.091	0.106
b	0.40	0.50	0.016	0.020
b1	0.50	0.70	0.020	0.028
c	0.35	0.45	0.014	0.018
D	4.45	4.70	0.175	0.185
E	4.40	4.65	0.173	0.183
e	1.17	1.37	0.046	0.054
e1	2.34	2.64	0.092	0.104
L	13.50	14.50	0.531	0.571
L1	1.80	2.20	0.071	0.087

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