

## isc Silicon NPN Pow Transistor

2SC2229

## DESCRIPTION

- High breakdown voltage
- Low output capacitance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

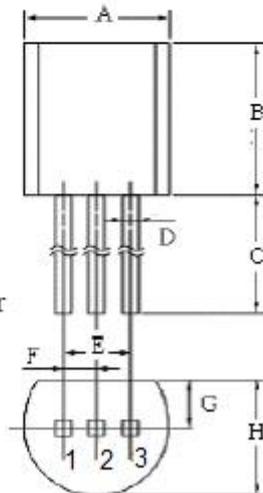
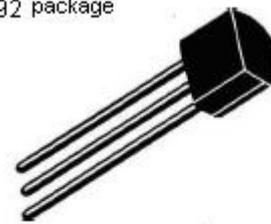
## APPLICATIONS

- High voltage switching applications
- Driver stage audio amplifier applications
- Black and white TV video output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	200	V
$V_{CEO}$	Collector-Emitter Voltage	1500	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	50	mA
$I_E$	Emitter Current-Continuous	-50	mA
$P_C$	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	0.8	W
$T_J$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

TO-92 package



1: Base  
2: Emitter  
3: Collector

DIM	mm	
	MIN	MAX
A	4.33	4.83
B	4.33	4.83
C	14.0	15.0
D	0.36	0.56
E	2.54	
F	1.27	
G	0.92	1.12
H	3.40	3.60

**isc Silicon NPN Pow Transistor****2SC2229****ELECTRICAL CHARACTERISTICS****T<sub>c</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>c</sub> = 10mA ; I <sub>B</sub> = 1mA			0.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>c</sub> = 10mA ; I <sub>B</sub> = 1mA			1.0	V
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = 200V; I <sub>E</sub> = 0			0.1	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>c</sub> = 10mA ; V <sub>CE</sub> = 5V	70		240	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>c</sub> = 10mA ; V <sub>CE</sub> = 30V		120		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 10V; f= 1.0MHz			5	pF