

**isc Silicon NPN Pow Transistor**
**2SC2383**
**DESCRIPTION**

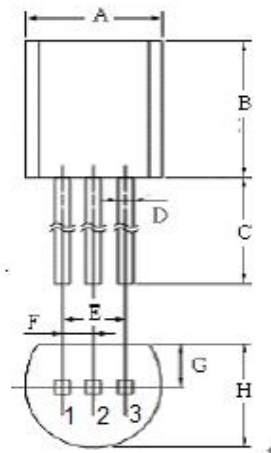
- High breakdown voltage
- Low output capacitance
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Color TV class B sound output applications
- Color TV vert.deflection output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{CEO}$	Collector-Emitter Voltage	160	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	1	A
$I_E$	Emitter Current-Continuous	1	A
$P_C$	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	0.9	W
$T_J$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



DIM	mm	
	MIN	MAX
A	4.7	5.1
B	7.8	8.0
C	13.8	14.0
D	0.6	1.0
E	2.54	
F	1.27	
G	1.1	1.3
H	3.6	4.0

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**ELECTRICAL CHARACTERISTICS**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV <sub>CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> = 500μA, I <sub>E</sub> = 0	160			V
BV <sub>CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0	160			V
BV <sub>EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> = 500μA, I <sub>C</sub> = 0	6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 500mA ; I <sub>B</sub> = 50mA			1.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 5mA ; V <sub>CE</sub> = 5V			1.2	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 160V; I <sub>E</sub> = 0			1	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0			1	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 200mA ; V <sub>CE</sub> = 5V	60		320	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 200mA ; V <sub>CE</sub> = 5V		20		MHz

**hFE Classification**

Classification	R	O	Y
hFE	60-120	100-200	160-320

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