

isc Silicon PNP Power Transistor

2SB823

DESCRIPTION

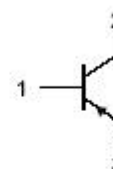
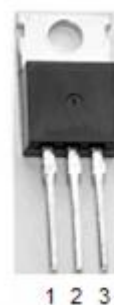
- Collector-Emitter Breakdown Voltage
 $V_{(BR)CEO} = -100V(\text{Min})$
- Low Collector Saturation Voltage
 $: V_{CE(sat)} = -1.5V(\text{Max}) @ I_C = -6A$
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

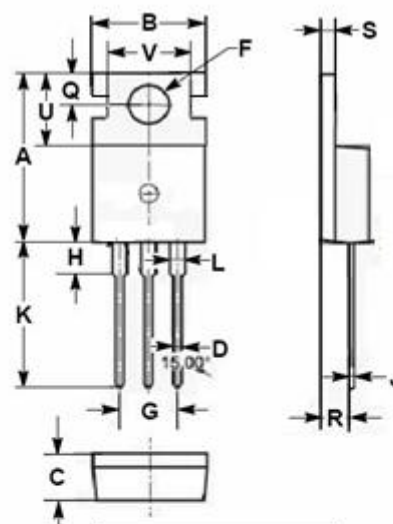
- Designed for use in general purpose amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-6	A
I_{CM}	Collector Current-Peak	-10	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	40	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



PIN: 1 Base
2 Collector
3 Emitter
TO-220C package



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA ; R _{BE} = ∞	-100			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -1mA ; I _E = 0	-100			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA ; I _C = 0	-6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A ; I _B = -0.6A			-1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -6A ; V _{CE} = -4V			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V ; I _E = 0			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V ; I _C = 0			-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -1A ; V _{CE} = -5V	60		200	
h _{FE-2}	DC Current Gain	I _C = -3A ; V _{CE} = -5V	20			
f _T	Current-Gain—Bandwidth Product	I _C = -1A ; V _{CE} = -5V		20		MHz

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