

isc Silicon NPN Power Transistor

2SD823

DESCRIPTION

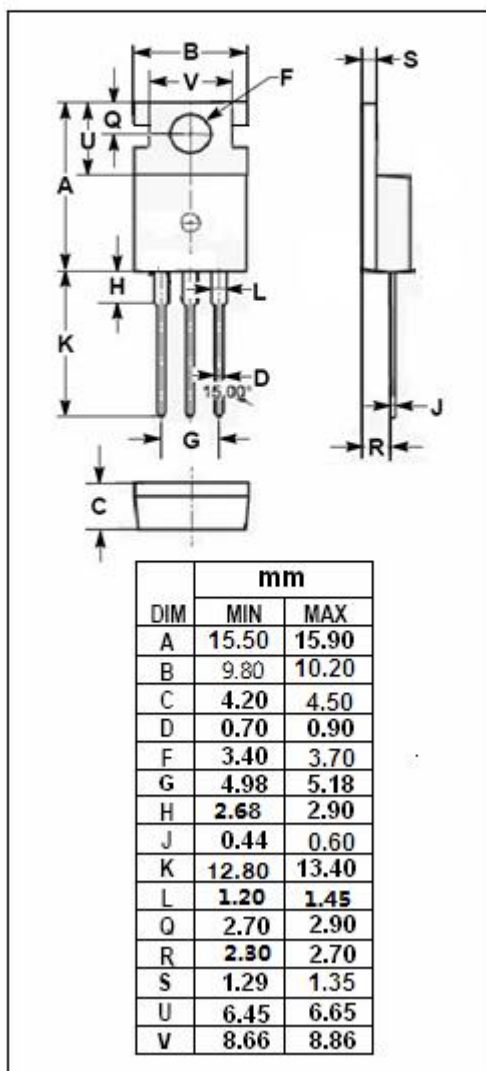
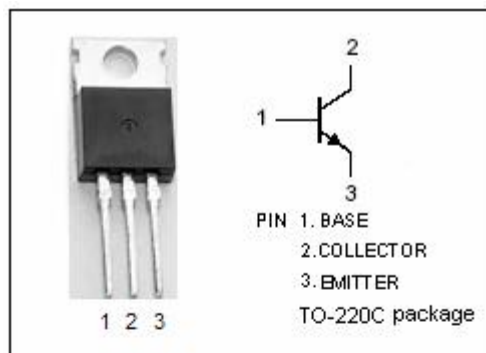
- Collector Current: $I_C = 6A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 90V(\text{Min.})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for B/W TV horizontal 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	90	V
V_{EBO}	Emitter-Base Voltage	7	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	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD823****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 = 5mA; I _B = 0	90			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	200			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	7			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			0.1	mA
h _{FE}	DC Current Gain	I _C = 3A; V _{CE} = 5V	20			
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 5V		15		MHz
t _f	Fall Time	I _C = 5A; I _{B1} = 0.6A			1.0	μs

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