

isc Silicon NPN Power Transistor

2SD723**DESCRIPTION**

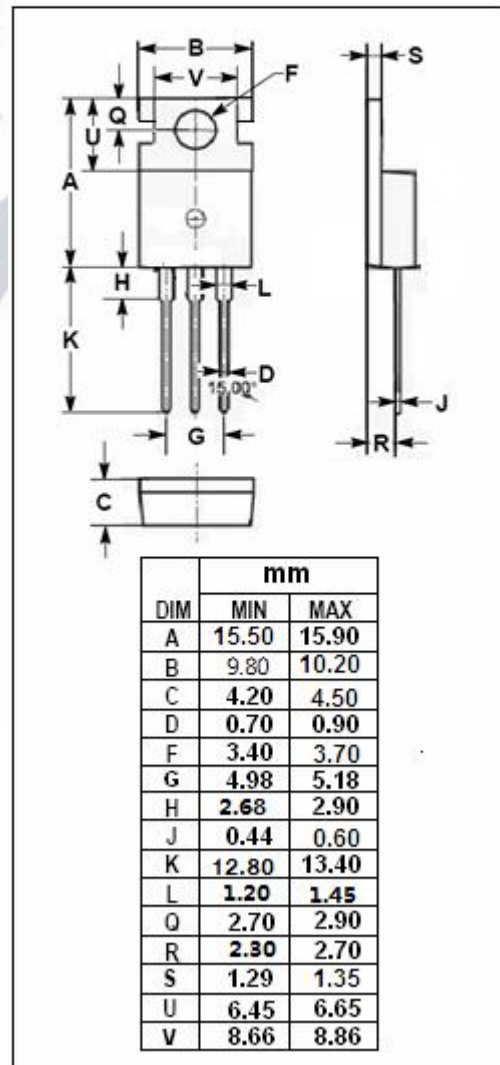
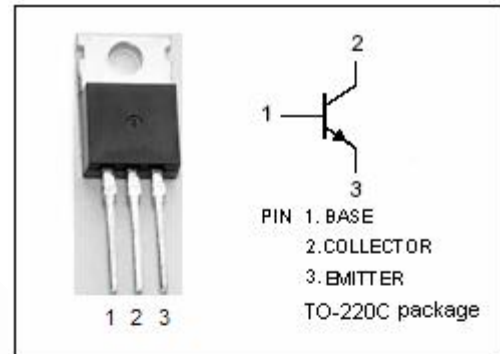
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CE0} = 100V(\text{Min})$
- DC Current Gain $-h_{FE} = 50(\text{Min}) @ I_C = 0.5A$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Pulse	6	A
I_B	Base Current	1	A
P_C	Collector Power Dissipation $T_C = 25^\circ\text{C}$	40	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD723****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA; I _B = 0	100		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 0.5A		1.2	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 4A; V _{CE} = 4V		1.8	V
I _{CES}	Collector Cutoff Current	V _{CE} = 100V; V _{EB} = 0		0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 100V; I _B = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		0.1	mA
h _{FE-1}	DC Current Gain	I _C = 0.5A ; V _{CE} = 4V	50	250	
h _{FE-2}	DC Current Gain	I _C = 4A ; V _{CE} = 4V	10		
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A ; V _{CE} = 10V	3		MHz