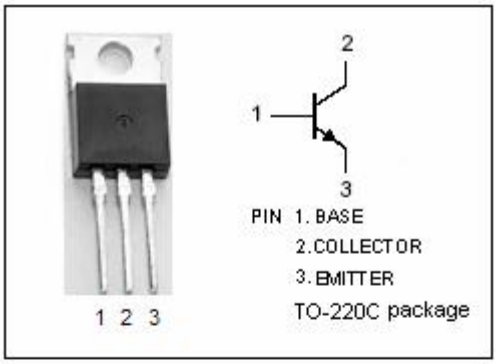
isc Silicon NPN Power Transistor — 2SD723

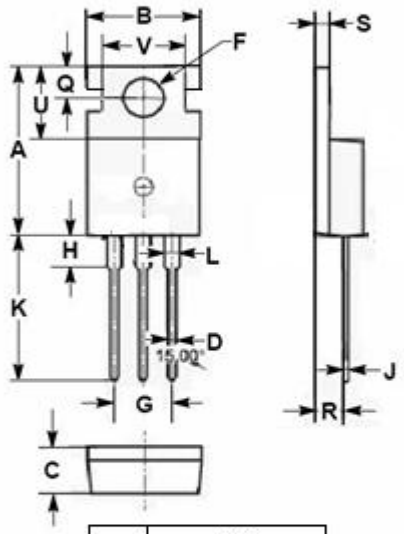


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)\ CEO}$= 100V(Min)
- DC Current Gain -h_{FE} = 50(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.



DIM	mm MIN	mm 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

Absolute maximum ratings(Ta=25℃)

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℃	40	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Ttemperature Range	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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