

isc Silicon NPN Power Transistor
2SC1683
DESCRIPTION

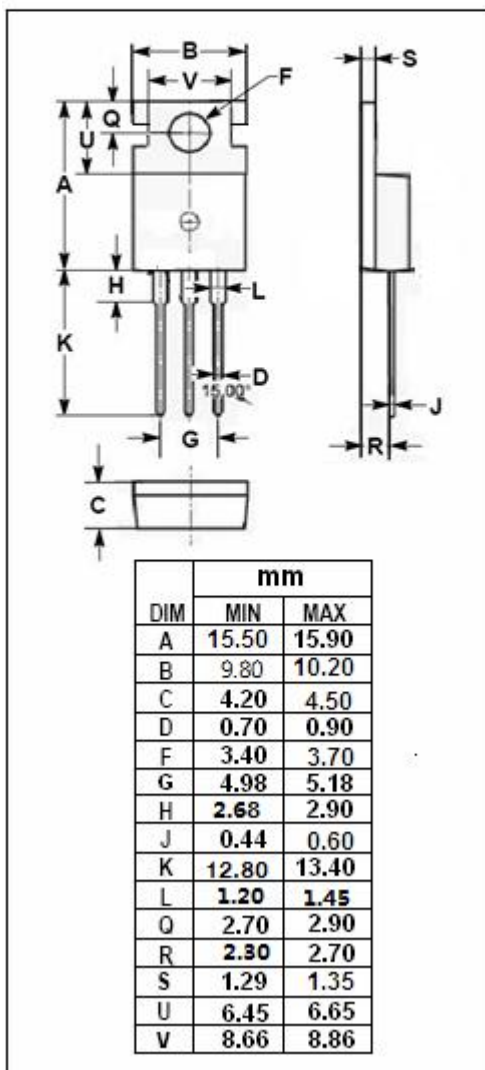
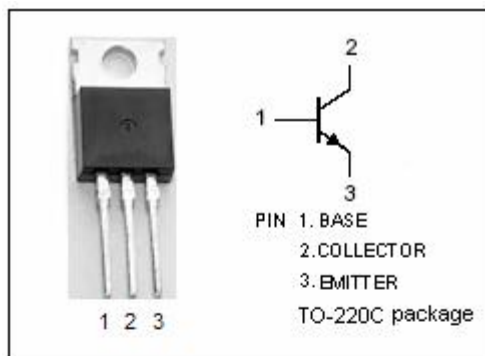
- Silicon NPN triple diffused mesa
- High breakdown voltage
- Large collector dissipation
- Complementary pair with 2SA843
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- AF power amplifier
- Color TV vertical deflection output

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	200	V
V _{CEO}	Collector-Emitter Voltage	150	V
V _{EBO}	Emitter-Base Voltage	5	V
I _c	Collector Current-Continuous	0.5	A
P _c	Collector Power Dissipation @ T _a =25°C	5	W
	Collector Power Dissipation @ T _c =25°C	20	
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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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 = 5mA ; I _B = 0	150			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			1.0	V
V _{BE(ON)}	Base-Emitter ON Voltage	I _C = 0.4A ; V _{CE} = 10V			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 200V ; I _E = 0			50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			50	μ A
h _{FE}	DC Current Gain	I _C = 0.4A ; V _{CE} = 10V	60		200	

◆ h_{FE} Classifications

P	Q
60-140	85-200

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