

isc Silicon NPN Power Transistor

2SD772

DESCRIPTION

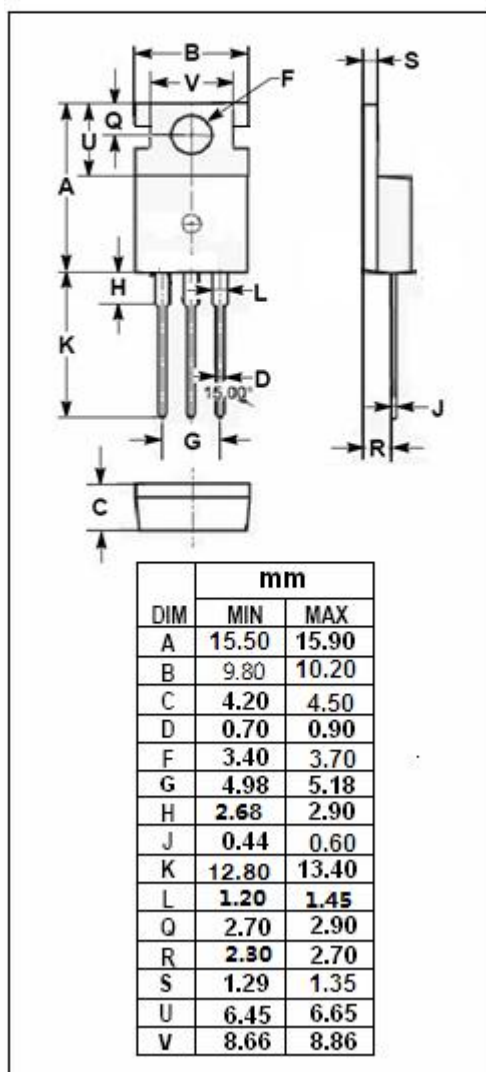
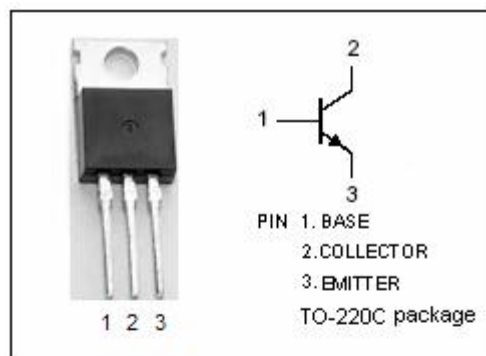
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 80V(\text{Min.})$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.6V(\text{Max.}) @ I_C = 5A$
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CES}	Collector-Emitter Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	10	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	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD772****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 30mA; L= 25mH	80			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 = 5A; I _B = 1A			1.6	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 5A; V _{CE} = 4V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E = 0			1	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 4V	14			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		40		MHz
t _f	Fall Time	I _C = 5A, I _{B1} = 0.8A; V _{EB} = 5V			1	μs

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