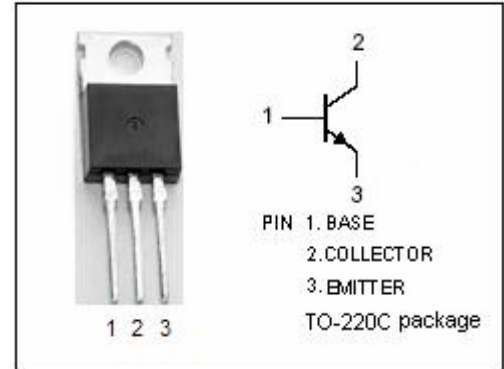


isc Silicon NPN Power Transistor
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DESCRIPTION

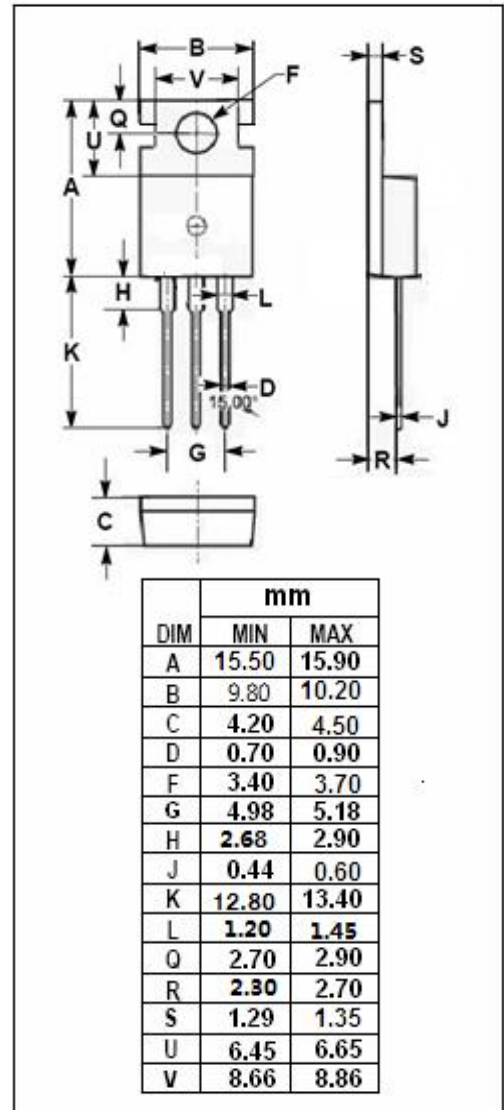
- High Voltage
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection circuits of color TV receivers and in line-operated switch-mode applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CES}	Collector-Emitter Voltage-V _{BE} =0	1500	V
V _{CEO}	Collector-Emitter Voltage	700	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	5	A
I _{CM}	Collector Current-Peak	8	A
I _B	Base Current-Continuous	3	A
I _{BM}	Base Current-Peak	5	A
P _C	Collector Power Dissipation @ T _C =25°C	100	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.25	°C/W

isc Silicon NPN Power Transistor

BU506

ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	700			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 1.33A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 1.33A			1.3	V
I _{CES}	Collector Cutoff Current	V _{CE} = V _{CEsmax} ; V _{BE} = 0 V _{CE} = V _{CEsmax} ; V _{BE} = 0; T _J = 125°C			0.5 1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			10	mA
h _{FE}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V	6		30	

Switching Times; Resistive load

t _{stg}	Storage Time	I _C = 3A, I _{B(end)} = 1A; L _B = 12 μ H		6.5		μ s
t _f	Fall Time			0.7		μ s

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