

isc Silicon NPN Power Transistors

BU120

DESCRIPTION

- Collector-Emitter Sustaining Voltage-  
:V<sub>CEO(SUS)</sub> = 200V(Min)

APPLICATIONS

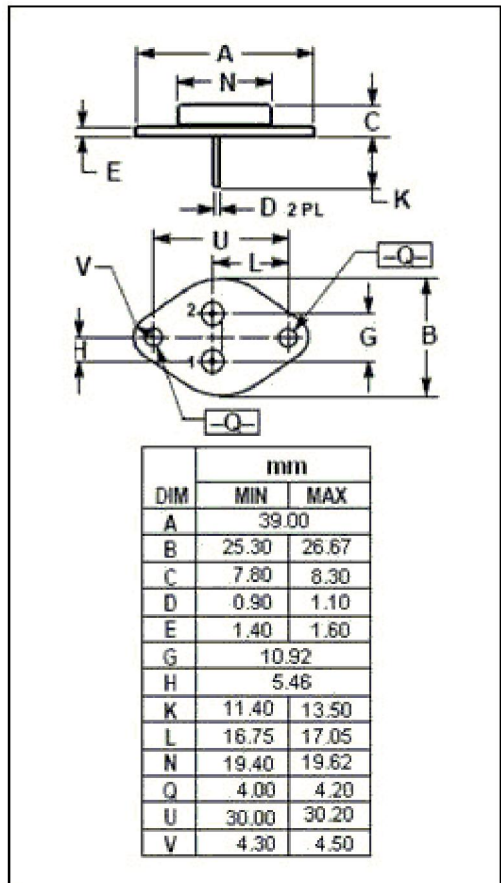
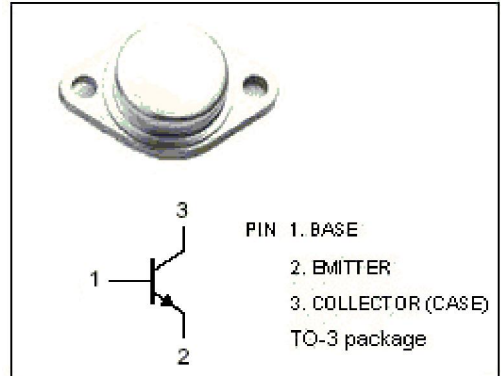
- Designed for horizontal deflection output stage of CTV receivers and high voltage, fast switching and industrial application.

ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Emitter Voltage	400	V
V <sub>CEO</sub>	Collector-Emitter Voltage	200	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
I <sub>C</sub>	Collector Current-Continuous	10	A
I <sub>CM</sub>	Collector Current-peak	15	A
I <sub>B</sub>	Base Current-Continuous	3.0	A
P <sub>C</sub>	Collector Power Dissipation @T <sub>C</sub> =25°C	100	W
T <sub>J</sub>	Junction Temperature	200	°C
T <sub>stg</sub>	Storage Temperature Range	-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.75	°C/W



**isc Silicon NPN Power Transistors****BU120****ELECTRICAL CHARACTERISTICS****T<sub>c</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 100mA; I <sub>B</sub> = 0	200		V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 1mA; I <sub>E</sub> = 0	400		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 2.5A		3.3	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 2.5A		2.2	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 400V; I <sub>E</sub> = 0		0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V; I <sub>C</sub> = 0		0.1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 1A; V <sub>CE</sub> = 10V	30	120	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 1A; V <sub>CE</sub> = 10V; f <sub>test</sub> = 1MHz	6		MHz