

isc Silicon NPN Power Transistor
BU209A
DESCRIPTION

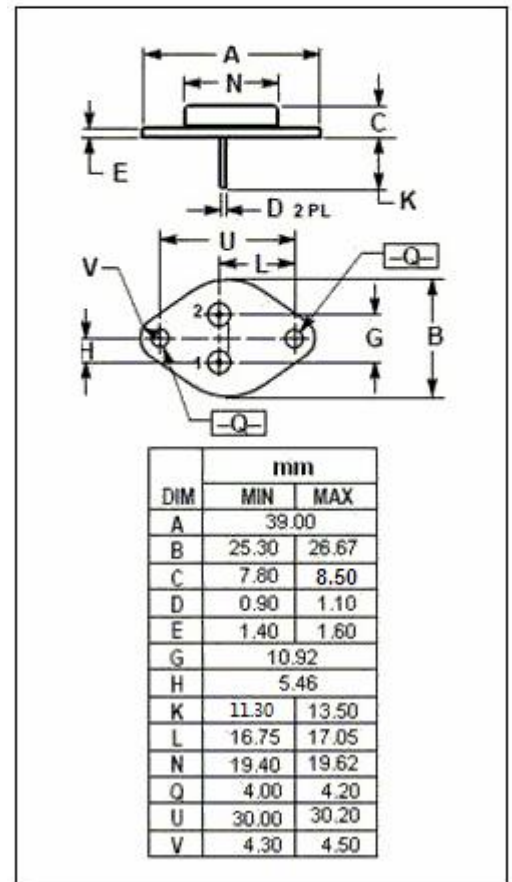
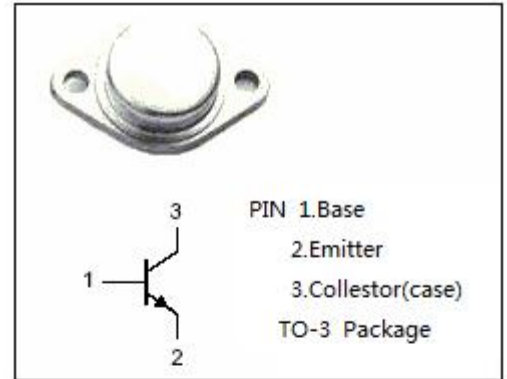
- High Voltage Capability
- High Peak Power
- High Current Capability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection circuits in color TV receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CEs}	Collector-Emitter Voltage	1500	V
V _{CEo}	Collector-Emitter Voltage	800	V
V _{EBo}	Emitter-Base Voltage	5	V
I _c	Collector Current-Continuous	4	A
I _{CM}	Collector Current-Peak	7.5	A
I _B	Base Current-Continuous	2.5	A
I _{BM}	Base Current-Peak	4	A
P _c	Collector Power Dissipation @T _c ≤95°C	12.5	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~150	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.6	°C/W

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CES}	Collector-Emitter Breakdown Voltage	I _C = 10mA	1500			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10mA ; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 1.3A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 1.3A			1.5	V
h _{FE}	DC Current Gain	I _C = 3A ; V _{CE} = 5V	2.25			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		125		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V; f _{test} = 5MHz		7		MHz

Switching Times

t _s	Storage Time	I _C = 3A; I _B = 1.8A; L _B = 10 μ H			10	μ s
t _f	Fall Time				0.7	μ s

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