

isc Silicon NPN Power Transistor

BU210

DESCRIPTION

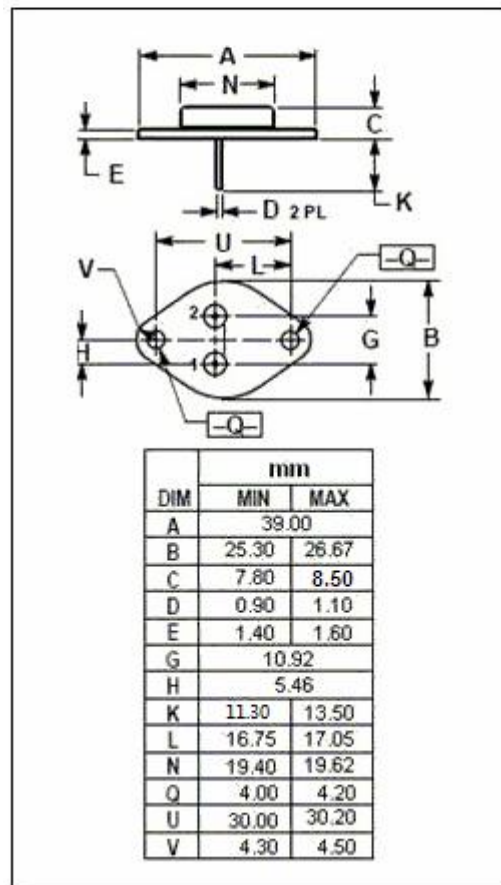
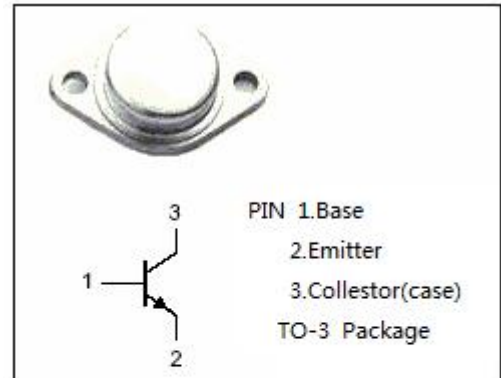
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 400V$ (Min)
- High Current Capability
- High Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for TV horizontal output and high power switching applications.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	12	A
I_{CM}	Collector Current-Peak	15	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}C$	85	W
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}C$



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ELECTRICAL CHARACTERISTICS
 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 50\text{mA}; I_B= 0$	250			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 1\text{mA}; I_E= 0$	400			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 1\text{mA}; I_C= 0$	8			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 2.5\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 2.5\text{A}$			2.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 400\text{V}; I_E= 0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 8\text{V}; I_C= 0$			0.1	mA
h_{FE}	DC Current Gain	$I_C= 8\text{A}; V_{CE}= 5\text{V}$	5			
f_T	Current-Gain—Bandwidth Product	$I_C= 0.5\text{A}; V_{CE}= 10\text{V}$		6		MHz
t_f	Fall Time	$I_C= 8\text{A}; I_{B1}= -I_{B2}= 2.5\text{A}$			1.0	μs

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