

Silicon NPN Power Transistor

BU415B

DESCRIPTION

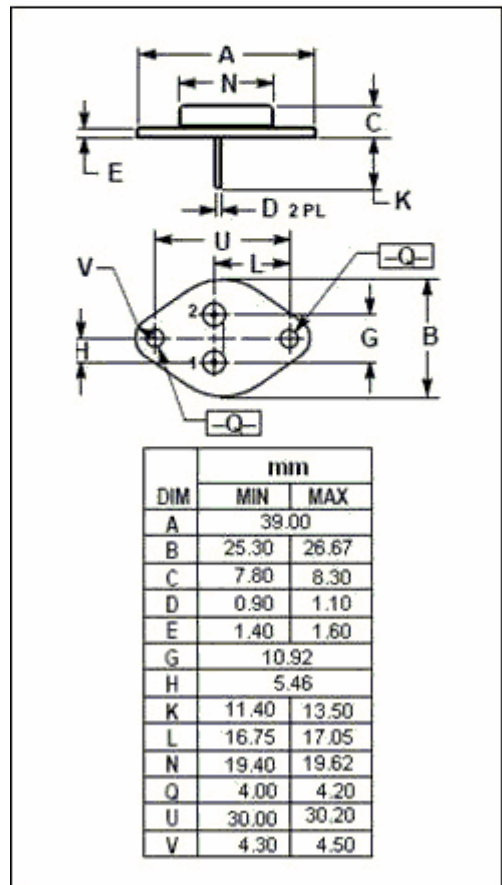
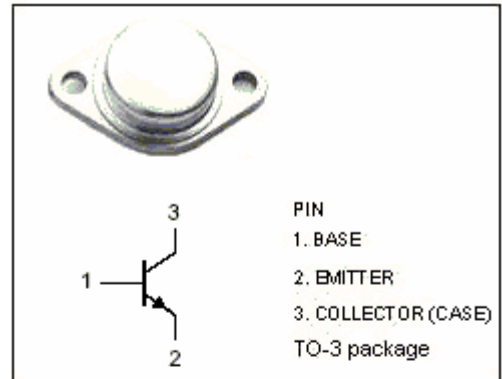
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 400V(\text{Min})$
- High Switching Speed

APPLICATIONS

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

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	12	A
I_{CM}	Collector Current-Peak Repetitive	15	A
P_C	Collector Power Dissipation @ $T_C=25$	120	W
T_J	Junction Temperature	200	
T_{stg}	Storage Temperature Range	-65~200	



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ELECTRICAL CHARACTERISTICS

 $T_C=25$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100mA; I_B=0$	400			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1mA; I_C=0$	6			V
I_{CBO}	Collector Cutoff Current	$V_{CB}=400V; I_E=0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6V; I_C=0$			0.1	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=8A; I_B=2.5A$			3.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=8A; I_B=2.5A$			2.2	V
h_{FE}	DC Current Gain	$I_C=5A; V_{CE}=5V$	4			