

Silicon NPN Power Transistor

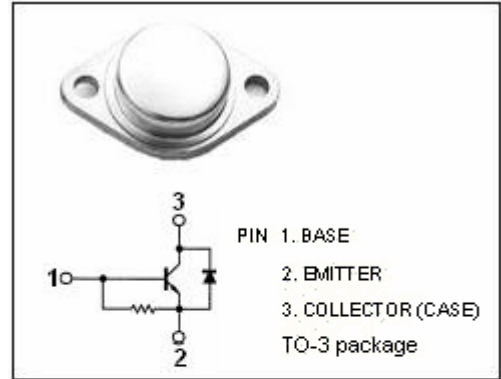
BU607D

DESCRIPTION

- High Voltage: $V_{CEV} = 330V(\text{Min})$
- Fast Switching Speed-
: $t_f = 0.75 \mu s(\text{Max})$
- Low Saturation Voltage-
: $V_{CE(\text{sat})} = 1.0V(\text{Max}) @ I_C = 5A$

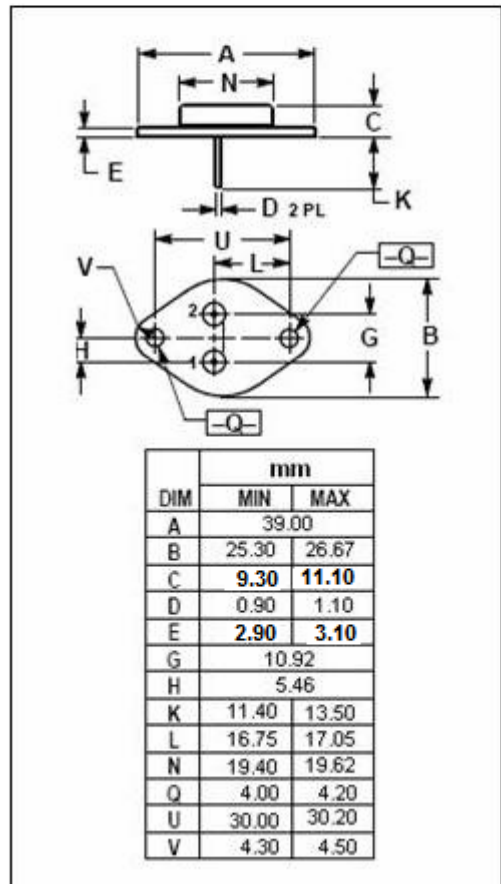
APPLICATIONS

- Designed for use in horizontal deflection output stages of TV's and CRT's



ABSOLUTE MAXIMUM RATINGS($T_a=25$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	330	V
V_{CEV}	Collector-Emitter Voltage	330	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current	4	A
P_C	Collector Power Dissipation @ $T_C=25$	90	W
T_J	Junction Temperature	150	
T_{stg}	Storage Temperature Range	-65~150	



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ELECTRICAL CHARACTERISTICS

 $T_C=25$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100mA; I_B=0$	150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5A; I_B=0.65A$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5A; I_B=0.65A$			1.3	V
h_{FE}	DC Current Gain	$I_C=2A; V_{CE}=5V;$		15		
I_{CEV}	Collector Cutoff Current	$V_{CE}=330V; V_{BE}=-1.5V$			15	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6V; I_C=0$			400	mA
f_T	Current-Gain—Bandwidth Product	$I_C=0.5A; V_{CE}=10V, f_{test}=1MHz$	10			MHz
V_{ECF}	C-E Diode Forward Voltage	$I_F=5A$			1.5	V
t_f	Fall Time	$I_C=5A; I_{B1}=-I_{B2}=0.65A, V_{CC}=40V$			0.75	μs