

Silicon NPN Power Transistors

BU112

DESCRIPTION

- Collector-Emitter Voltage-
: $V_{CEX(SUS)} = 550V(\text{Min.})$
- Collector Current- $I_C = 10A$

APPLICATIONS

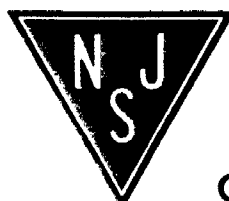
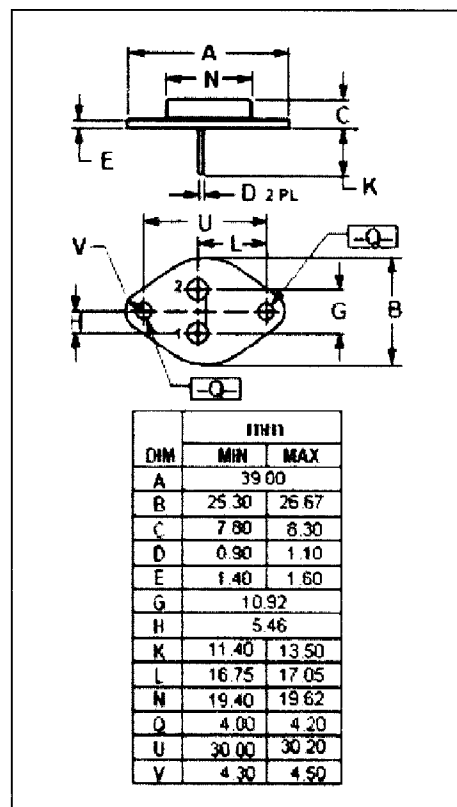
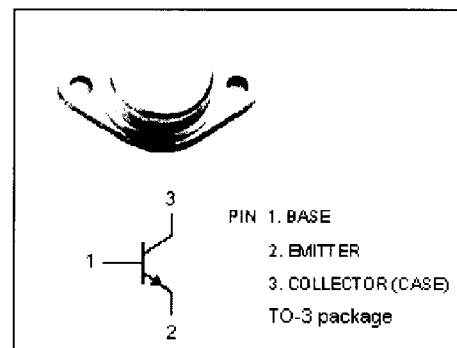
- Designed for deflection circuits applications in color TV receivers fitted with 90°C kinescope.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	550	V
V_{CEX}	Collector-Emitter Voltage $V_{BE} = -5V$	550	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	60	W
T_J	Junction Temperature	200	$^\circ C$
T_{stg}	Storage Temperature Range	-65~200	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	2.9	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

$T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Collector-Base Breakdown Voltage	$I_E=30\text{mA}; I_C=0$	10			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10\text{A}; I_B=2\text{A}$			3.0	V
I_{CEX}	Collector Cutoff Current	$V_{CE}=550\text{V}; V_{BE}=-5\text{V}$			10	mA
h_{FE}	DC Current Gain	$I_C=6\text{A}; V_{CE}=2\text{V}$	7			
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=4\text{V}$		6		MHz
C_{OB}	Collector Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1\text{MHz}$		250		pF
t_f	Fall Time	$I_C=6\text{A}; I_{B1}=1\text{A}; V_{BE}=-3\text{V}$			1.0	μs