

Silicon NPN Power Transistor

BU326

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 375V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.5V(\text{Max.}) @ I_C = 2.5A$

APPLICATIONS

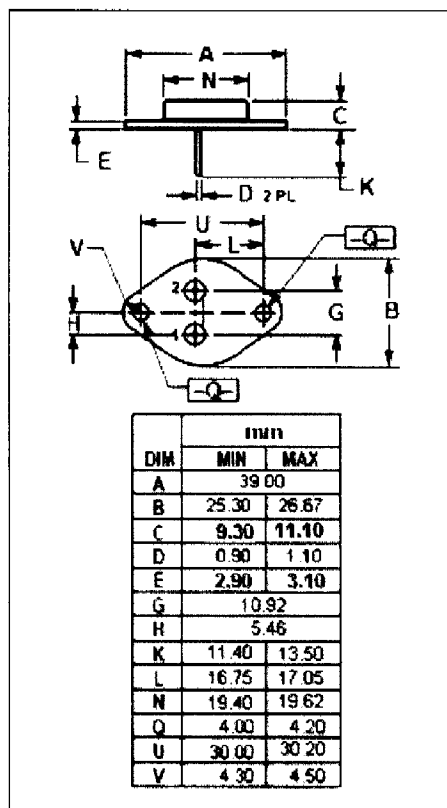
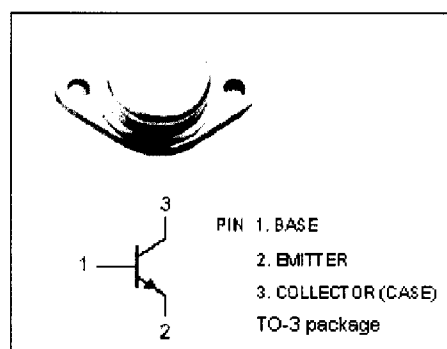
- Designed for use in operating in color TV receivers chopper supplies.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	800	V
V_{CEO}	Collector-Emitter Voltage	375	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	75	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	2.33	$^\circ\text{C/W}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

Silicon NPN Power Transistor

BU326

ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=0.1\text{A}$; $I_B=0$; $L=25\text{mH}$	375			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=2.5\text{A}$; $I_B=0.5\text{A}$			1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=1.25\text{A}$			3.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C=2.5\text{A}$; $I_B=0.5\text{A}$			1.4	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=1.25\text{A}$			1.6	V
I_{CES}	Collector Cutoff Current	$V_{CE}=800\text{V}$; $V_{BE}=0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=10\text{V}$; $I_C=0$			10	mA
h_{FE}	DC Current Gain	$I_C=1\text{A}$; $V_{CE}=5\text{V}$		25		
f_T	Current-Gain—Bandwidth Product	$I_C=0.2\text{A}$; $V_{CE}=10\text{V}$; $f=1.0\text{MHz}$	4			MHz

Switching Times

t_{on}	Turn-On Time	$I_C=2.5\text{A}$; $I_{B1}=0.5\text{A}$; $I_{B2}=-1\text{A}$; $V_{CC}=250\text{V}$			0.5	μs
t_{stg}	Storage Time				3.5	μs
t_f	Fall Time				0.5	μs