

Silicon NPN Power Transistor

BU426

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
 : $V_{CEO(SUS)} = 375V(\text{Min})$
- High Switching Speed

APPLICATIONS

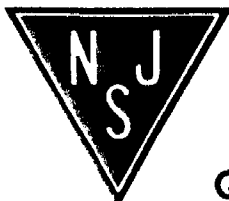
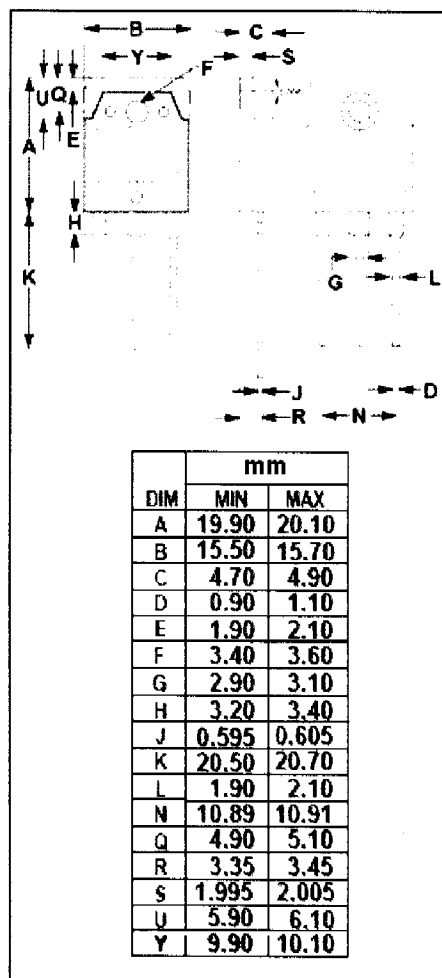
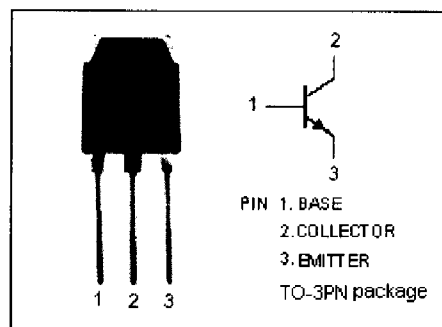
- Designed for switch-mode CTV supply systems applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	800	V
V_{CES}	Collector-Emitter Voltage $V_{BE}=0$	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	10	A
I_B	Base Current-Continuous	2	A
I_{BM}	Base Current-Peak	3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	70	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	1.1	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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	$V_{CE}=800\text{V}; V_{BE}=0$ $V_{CE}=800\text{V}; V_{BE}=0; T_J=125^\circ\text{C}$			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=10\text{V}; I_C=0$			10	mA
h_{FE}	DC Current Gain	$I_C=0.6\text{A}; V_{CE}=5\text{V}$	15		60	

Switching Times

t_{on}	Turn-On Time	$I_C=2.5\text{A}; I_{B1}=0.5\text{A}; I_{B2}=-1\text{A}; V_{CC}=250\text{V}$			0.6	μs
t_{stg}	Storage Time				3.5	μs
t_f	Fall Time			0.15		μs