

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

BU926

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 400V$ (Min)
- Low Saturation Voltage
: $V_{CE(sat)} = 1.5V$ (Max) @ $I_C = 5A$

APPLICATIONS

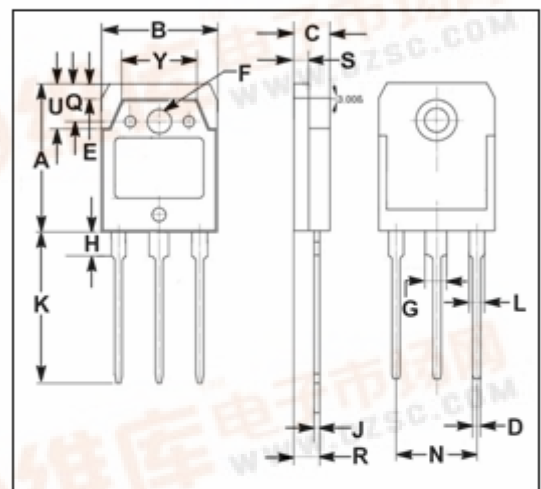
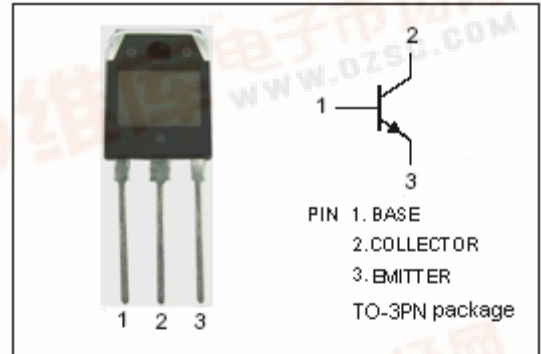
- Designed for use in high-voltage , high-speed , power switching in inductive circuit.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Base-Emitter Voltage	850	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current- Continuous	8	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current- Continuous	2	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	120	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.04	$^{\circ}C/W$



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10



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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	$I_C=100\text{mA}; I_B=0$	400			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=1\text{A}$			1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=8\text{A}; I_B=2\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=1\text{A}$			1.6	V
I_{CEX}	Collector Cutoff Current	$V_{CE}=850\text{V}; V_{BE}=-2.5\text{V}$			0.5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7\text{V}; I_C=0$			1.0	mA
f_T	Current-Gain—Bandwidth Product	$I_C=0.2\text{A}; V_{CE}=10\text{V}; f_{test}=1\text{MHz}$		4		MHz

Switching Times

t_{on}	Turn-On Time	$I_C=5\text{A}; I_{B1}=-I_{B2}=1\text{A}; V_{CC}=250\text{V}$			1.0	μs
t_{stg}	Storage Time				3.2	μs
t_f	Fall Time				0.8	μs