

isc Silicon NPN Power Transistor

BUV37

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)}=400V(\text{Min.})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)}=2.0V(\text{Max.})@ I_C=10A$

APPLICATIONS

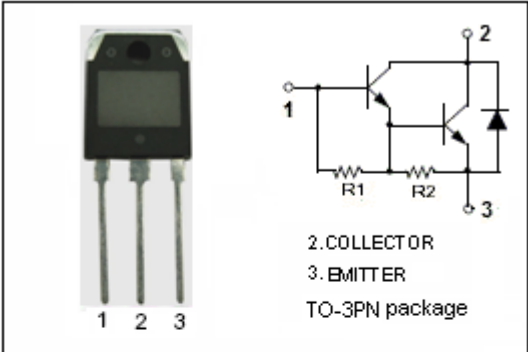
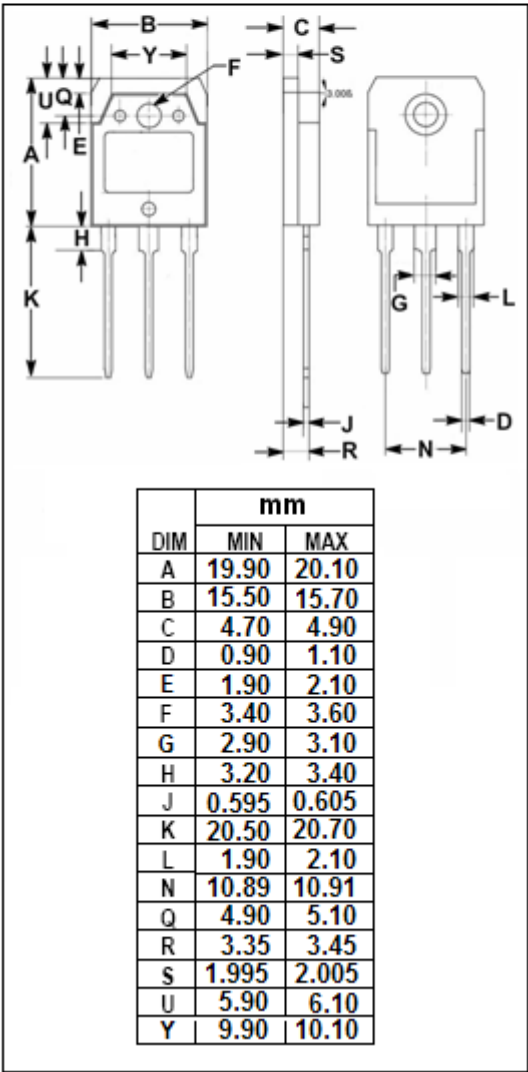
- Designed for use in automotive ignition circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	600	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current- Continuous	15	A
I_{CM}	Collector Current-Peak	30	A
I_B	Base Current - Continuous	4	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}C$	100	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	1.25	$^{\circ}C/W$



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 5A; I _B = 0; L= 15mH	400			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 7 A; I _B = 70mA			1.5	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 10 A; I _B = 150mA			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10 A; I _B = 150mA			2.7	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 400V; I _B = 0			0.25	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			40	mA
h _{FE}	DC Current Gain	I _C = 15A; V _{CE} = 5V	20			