

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CE(SUS)} = 60V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 0.6V(\text{Max.}) @ I_C = 1A$
- Wide Area of Safe Operation
- Complement to Type 2N4919
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

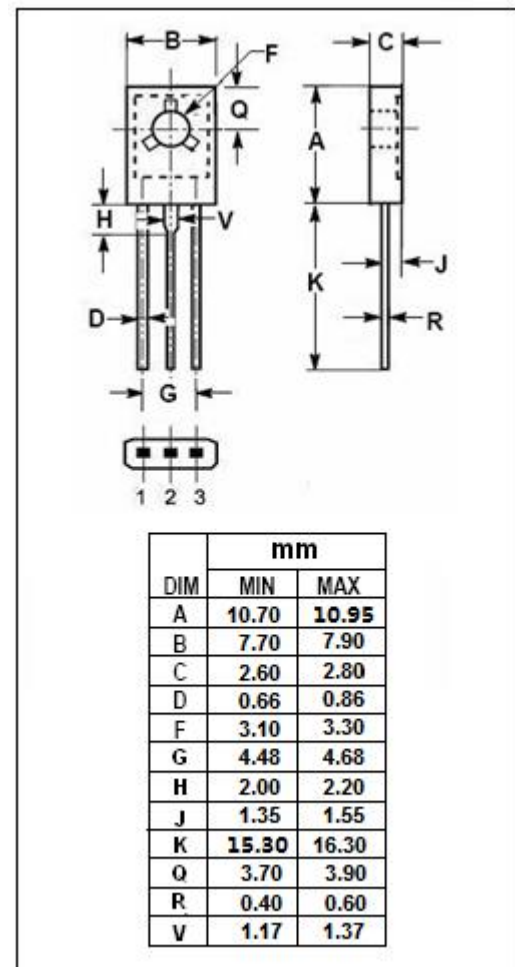
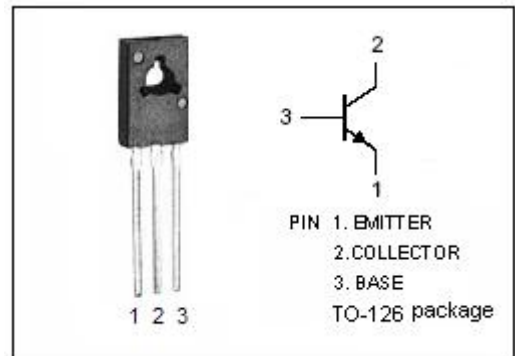
- Designed for driver circuits, switching and amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
I_{CM}	Collector Current-Peak	3	A
I_B	Collector Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	30	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	4.16	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**2N4922****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sus)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			0.6	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			1.3	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 1A ; V _{CE} = 1V			1.3	V
I _{CEX}	Collector Cutoff Current	V _{CE} =40V; V _{BE(off)} = -1.5V V _{CE} =40V; V _{BE(off)} = -1.5V; T _C =125°C			0.1 0.5	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 30V; I _B = 0			0.5	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 50mA ; V _{CE} = 1V	40			
h _{FE-2}	DC Current Gain	I _C = 500mA ; V _{CE} = 1V	30		150	
h _{FE-3}	DC Current Gain	I _C = 1A ; V _{CE} = 1V	10			
f _T	Current-Gain—Bandwidth Product	I _C = 0.25A; V _{CE} = 10V, f _{test} = 1MHz	3			MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 100kHz			100	pF

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