

isc Silicon NPN Darlington Power Transistor

2SD920

DESCRIPTION

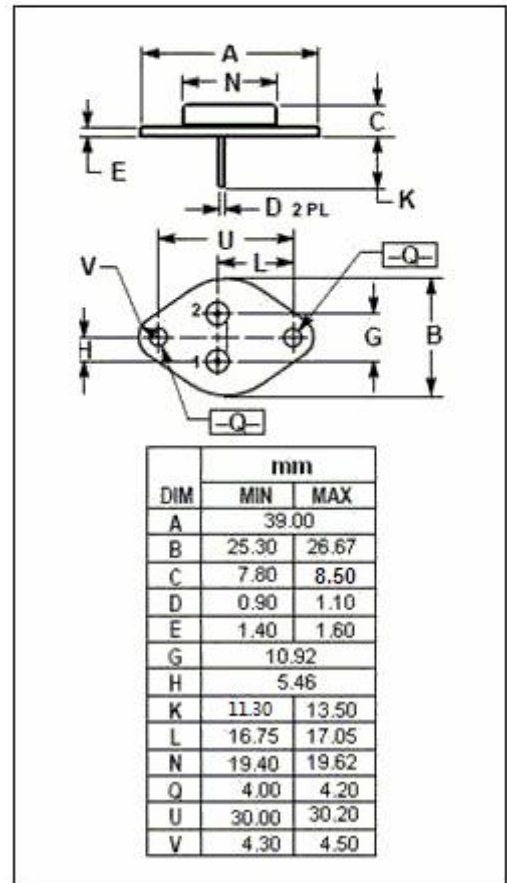
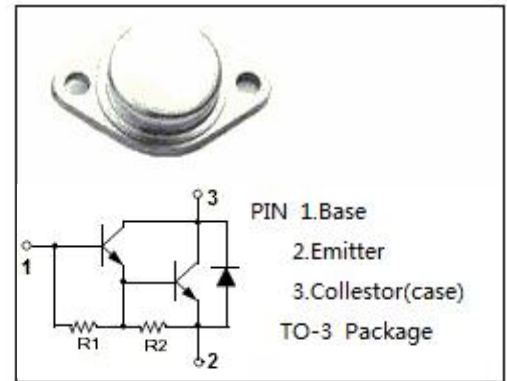
- High DC Current Gain
: $h_{FE} = 700(\text{Min.}) @ I_C = 1A, V_{CE} = 4V$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min})$
- Low Collector Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for series regulators ,color TV, power supplies and similar devices applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	100	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor**2SD920****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA, I _B = 0	200			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 3A, I _B = 12mA			2.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation voltage	I _C = 5A, I _B = 20mA			4.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3.0A ; V _{CE} = 3V			2.5	V
I _{CBO}	Collector Cutoff current	V _{CB} = 200V, I _E = 0			0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 200V, I _B = 0			0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 4V	700		20000	

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