

isc Silicon NPN Darlington Power Transistor

2SD929

DESCRIPTION

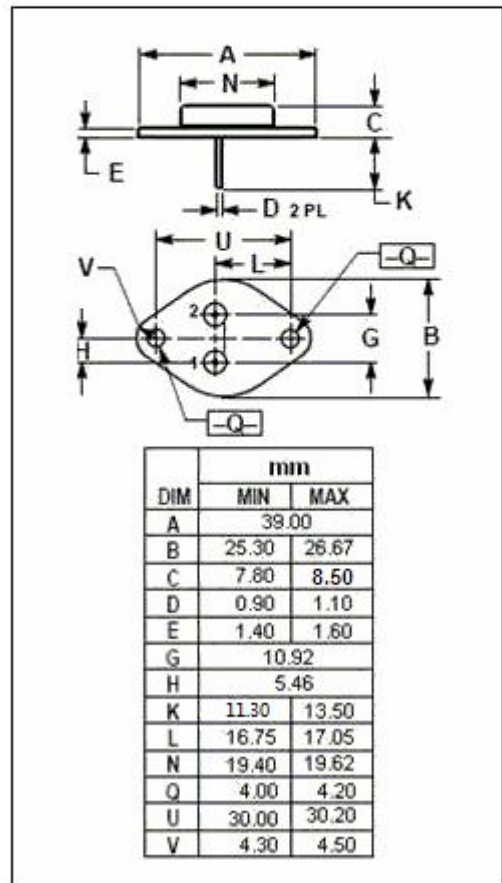
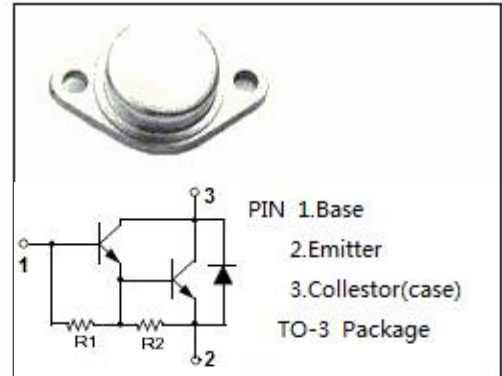
- High DC Current Gain
: $h_{FE} = 700(\text{Min.}) @ I_C = 1A, V_{CE} = 4V$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 180V(\text{Min})$
- High Reliability
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Color & B/W TV power supply
- Active power filter
- Series regulators
- General purpose power amplifiers

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	180	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	0.5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	80	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**2SD929****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 = 10mA, I _B = 0	180			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _B = 0	200			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 3mA; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.5A, I _B = 50mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1.5A, I _B = 50mA			2.0	V
I _{CBO}	Collector Cutoff current	V _{CB} = 200V, I _E = 0			0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 180V, I _B = 0			0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			3	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 4V	700		20000	

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