

isc Silicon NPN Power Transistor
2SD904
DESCRIPTION

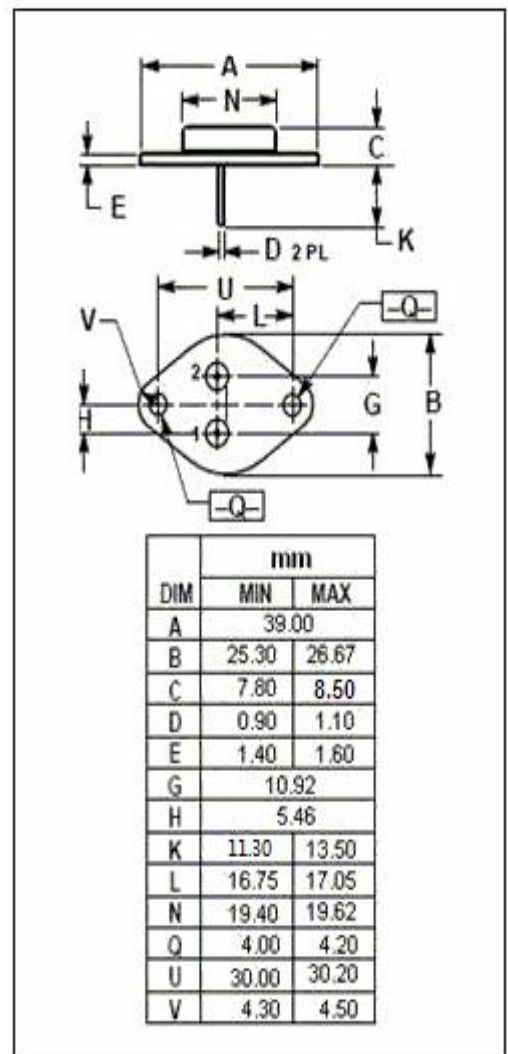
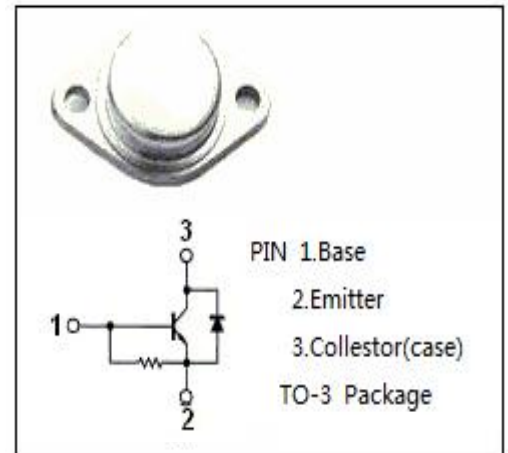
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 5.0V$ (Max.) @ $I_C = 3A$
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for color TV horizontal output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	7	A
I_{CM}	Collector Current- Peak	10	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ C$	3	W
	Collector Power Dissipation @ $T_C = 25^\circ C$	50	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-40~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD904****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0, L= 35mH	600			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 200mA; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.75A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A			1.6	V
I _{CES}	Collector Cutoff Current	V _{CB} = 1500V; V _{BE} = 0			1.0	mA
I _{EBO}	Collector Cutoff Current	V _{EB} = 4V; I _C = 0	44		100	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	8			
h _{FE-2}	DC Current Gain	I _C = 4A; V _{CE} = 5V	5		10	
V _{ECF}	C-E Diode Forward Voltage	I _F = 4A			2.0	V

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