

isc Silicon NPN Power Transistor

2SD819

DESCRIPTION

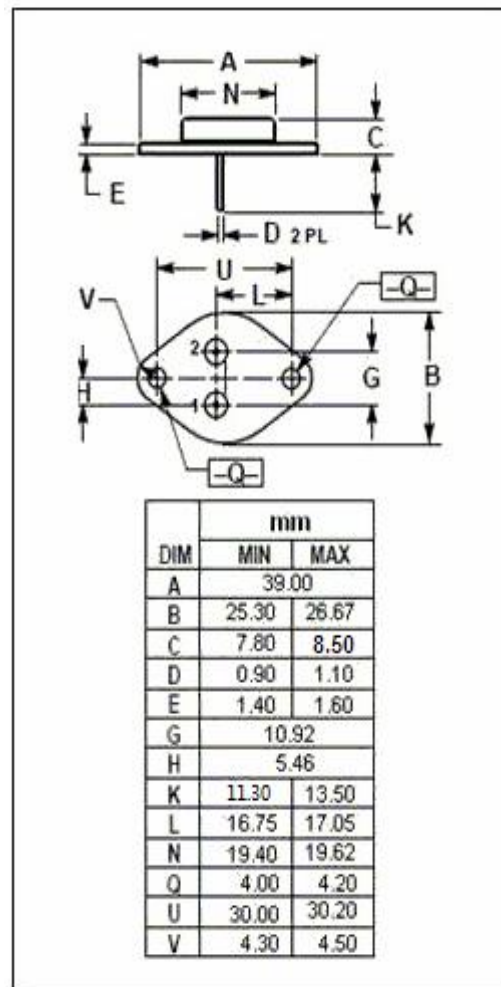
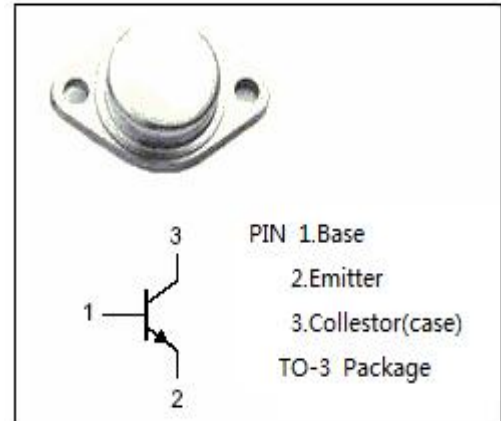
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 1500V$ (Min.)
- Low Collector Saturation Voltage-
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for color TV horizontal output applications.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3.5	A
I_E	Emitter Current-Continuous	3.5	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ C$	50	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD819****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.8A		4.0	8.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 0.8A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 500V; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	mA
h _{FE}	DC Current Gain	I _C = 0.5A; V _{CE} = 5V	8	20		
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz		95		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 10V		3		MHz
t _f	Fall Time	I _{CP} = 3A; I _{B1(end)} = 0.8A		0.5	1.0	μ s

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