

isc Silicon NPN Power Transistor

2SC2809

DESCRIPTION

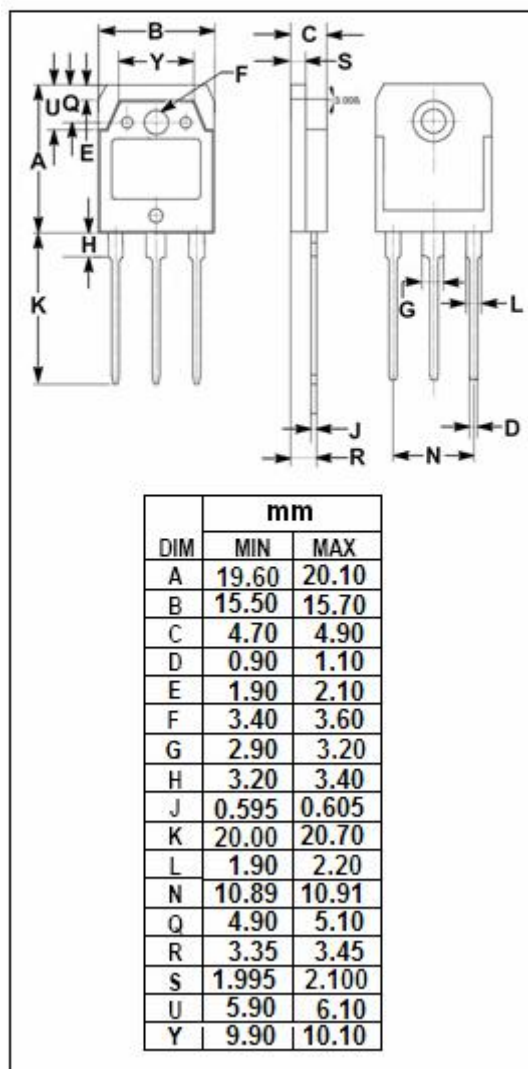
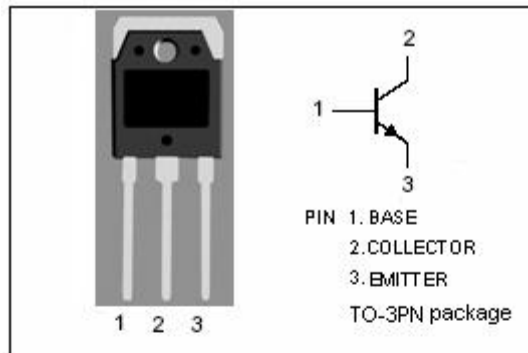
- Low Collector Saturation Voltage
- Collector-Emitter Breakdown Voltage
- Good Linearity of h_{FE}
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for switching regulators applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Pulse	4	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	50	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



isc Silicon NPN Power Transistor**2SC2809****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	300			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.5A; I _B = 0.3A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1.5A; I _B =0.3A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} =300V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			100	μ A
h _{FE}	DC Current Gain	I _C = 0.3A ; V _{CE} = 4V	50			
f _T	Current-Gain—Bandwidth Product	I _E = 0.3A ; V _{CE} = 12V		20		MHz

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