

isc Silicon PNP Darlington Power Transistor

MJ15019

DESCRIPTION

- With TO-3 packaging
- Very high DC current gain
- Monolithic darlington transistor with integrated antiparallel collector-emitter diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

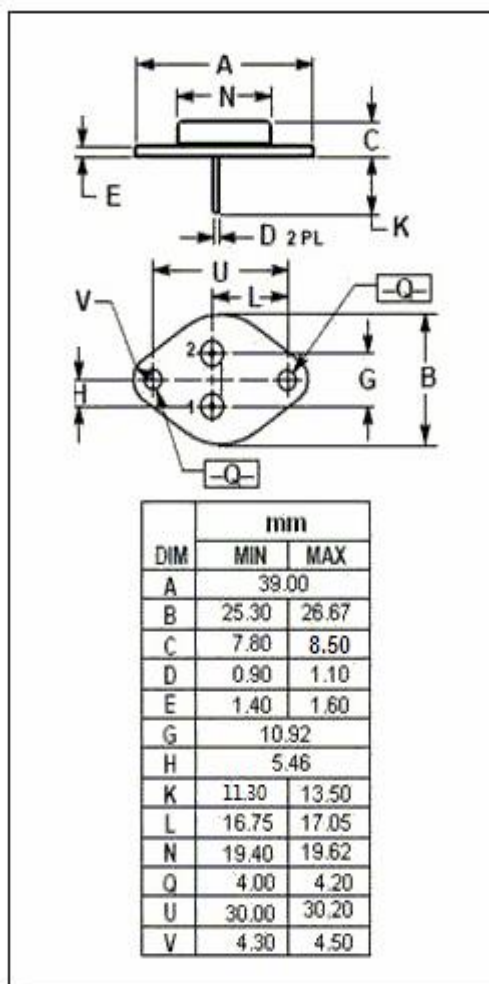
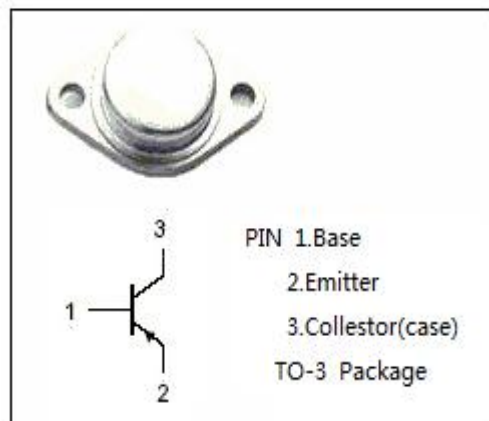
- Electronic ignition
- Alternator regulator
- Motor controls

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	-7	V
I_C	Collector Current-Continuous	-4	A
I_B	Base Current- Continuous	-2	A
P_D	Collector Power Dissipation	150	W
T_j	Max.Junction Temperature	200	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	1.17	$^{\circ}\text{C/W}$



isc Silicon PNP Darlington Power Transistor**MJ15019****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -100mA, I _B = 0	-200		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -1.0A, I _B = 0.1A		-1.0	V
V _{BE(on)}	Base-Emitter Saturation Voltage	I _C = -1.0A, V _{CE} = 4.0V		-2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -150V, I _B = 0		-0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0		-0.5	mA
h _{FE-1}	DC Current Gain	I _C =-1A ; V _{CE} =-4V	30		
h _{FE-2}	DC Current Gain	I _C =-3A ; V _{CE} =-4V	10		

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