

isc Silicon PNP Darlington Power Transistor

MJH6287

DESCRIPTION

- With TO-3PN packaging
- Very high DC current gain
- Monolithic darlington transistor with integrated antiparallel collector-emitter diode
- Complement to type MJH6284
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

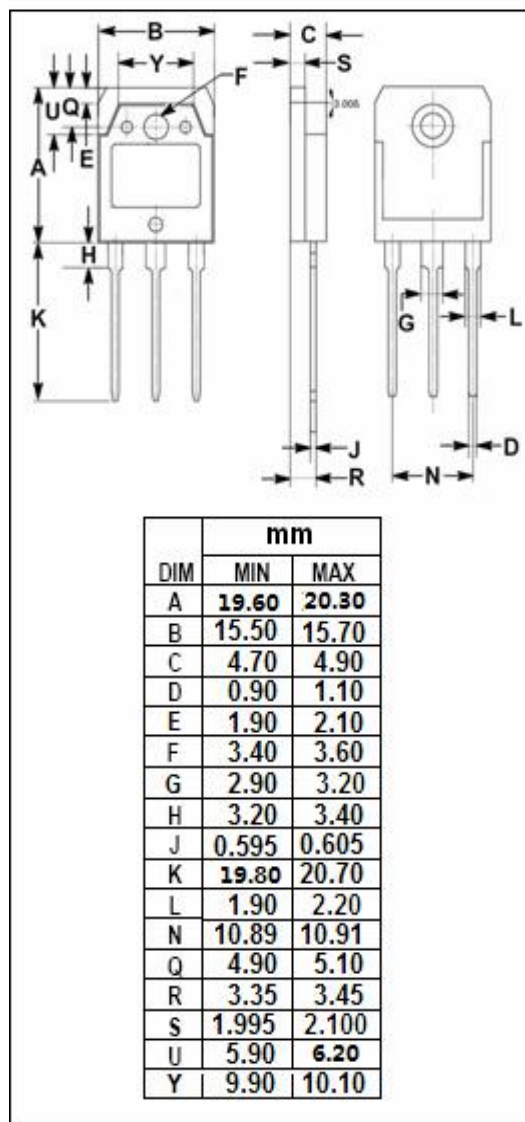
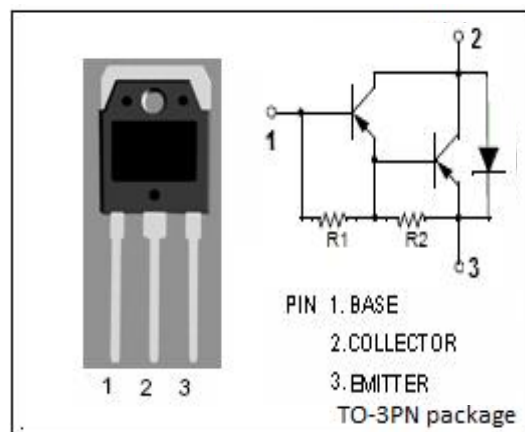
- AC-DC motor control
- Electronic ignition
- Alternator regulator

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-20	A
I_{CM}	Collector Current-Peak	-40	A
I_B	Base Current	-0.5	A
P_C	Collector Power Dissipation	160	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.78	$^{\circ}\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^{\circ}\text{C/W}$



isc Silicon PNP Darlington Power Transistor**MJH6287****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	-100		V
V _{CE(sat)1}	Collector-Emitter Saturation Voltage	I _C = -10A ,I _B = -40mA		-2.0	V
V _{CE(sat)2}	Collector-Emitter Saturation Voltage	I _C = -20A ,I _B = -200mA		-3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C =- 20A ,I _B = -200mA		-4.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -10A ; V _{CE} = -3V		-2.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} =-100V, I _E = 0		-5.0	mA
I _{CEO}	Collector Cutoff Current	V _{CE} =-50V, I _B = 0		-1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0		-2.0	mA
h _{FE-1}	DC Current Gain	I _C = -10A ; V _{CE} =-3V	750	18000	
h _{FE-2}	DC Current Gain	I _C = -20A ; V _{CE} = -3V	100		

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