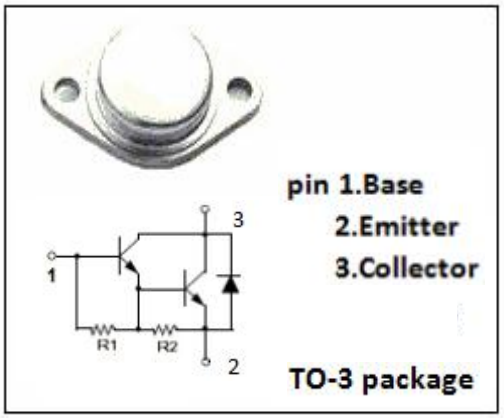
Silicon NPN Darlington Power Transistor — MJ4035

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 100V(Min)
- DC Current Gain-
  : h_{FE}= 1000(Min)@ I_C= 10A
- Fast switching speed

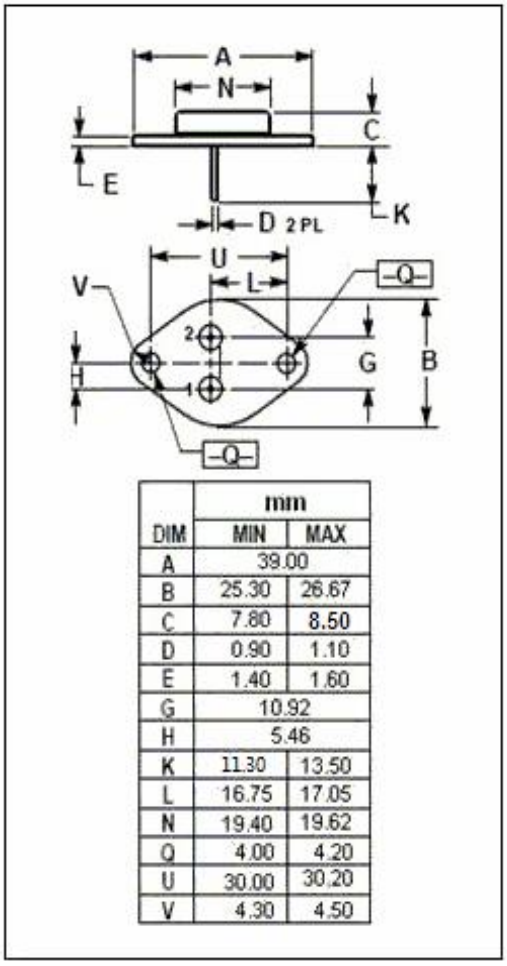
APPLICATIONS

- Switching
- Amplifier



ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

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	16	A
P_C	Total Power Dissipation @ T_C=25℃	150	W
T_J	Max.Junction Temperature	-65~200	℃
T_{stg}	Storage Temperature Range	-65~200	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

THERMAL CHARACTERISTICS

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

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ELECTRICAL CHARACTERISTICS （T_C=25℃ unless otherwise specified）

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA, I_B=0	100	--	--	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 40mA	--	--	2.5	V
		I_C= 16A; I_B= 80mA	--	--	4.0	V
$V_{BE(on)}$	Base-Emitter Voltage	I_C= 10A; V_{CE}= 3V	--	--	3	V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C=0	--	--	5	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 100V; I_B= 0	--	--	1	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 100V; I_E=0	--	--	1	mA
h_{FE}	DC Current Gain	I_C= 10A; V_{CE}= 3V	1000	--	--	

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