

isc Silicon PNP Darlington Power Transistor

MJ4031

DESCRIPTION

- With TO-3 package
- Respectively complement to type MJ4034
- DARLINGTON
- High DC current gain

APPLICATIONS

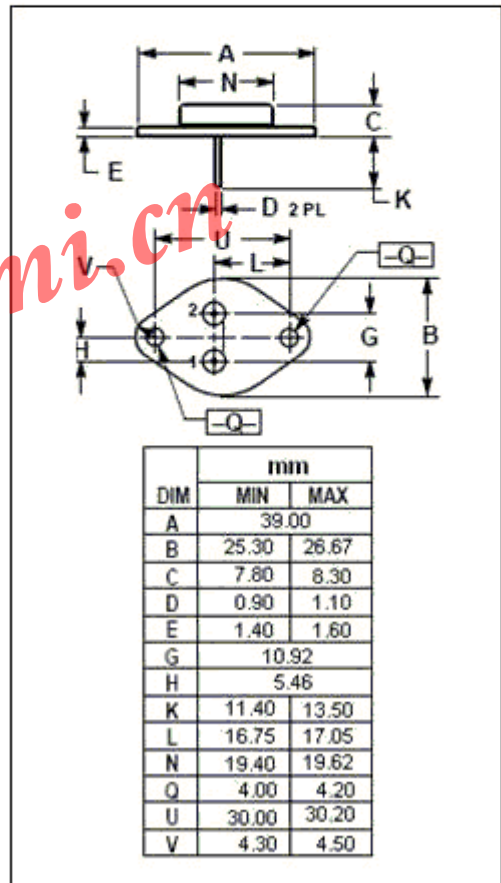
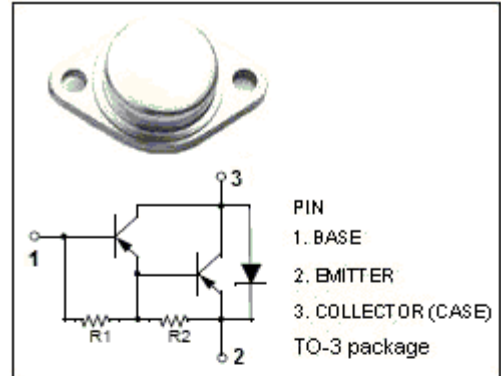
- For use as output devices in complementary general purpose amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_C=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-80	V
V _{CEO}	Collector-Emitter Voltage	-80	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-16	A
I _B	Base Current	-0.5	A
P _C	Collector Power Dissipation@T _C =25°C	150	W
T _J	Junction Temperature	200	°C
T _{stg}	Storage Temperature	-55~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.17	°C/W



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ELECTRICAL CHARACTERISTICS

 $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=-100\text{mA}$; $I_B=0$	-80		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=-10\text{A}$; $I_B=-40\text{mA}$		-2.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=-16\text{A}$; $I_B=-80\text{mA}$		-4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-5\text{A}$; $I_B=-400\text{mA}$		-3	V
$V_{BE(on)}$	Base-Emitter On voltage	$I_C=-10\text{A}$; $V_{CE}=-3\text{V}$		-3	V
I_{CER}	Collector Cutoff Current	$V_{CB}=-80\text{V}$; $R_{BE}=1\text{K}\Omega$; $V_{CB}=-80\text{V}$; $R_{BE}=1\text{K}\Omega$; $T_C=150^\circ\text{C}$		-1 -5	mA
I_{CEO}	Collector Cutoff current	$V_{CE}=-40\text{V}$; $I_B=0$		-3	mA
I_{EBO}	Emitter Cut-off current	$V_{EB}=-5\text{V}$; $I_C=0$		-5	mA
h_{FE}	DC Current Gain	$I_C=-10\text{A}$; $V_{CE}=-3\text{V}$	1000		