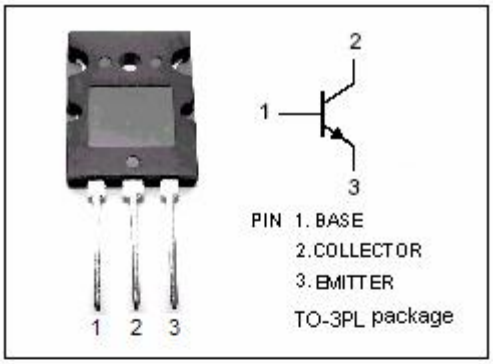
isc Silicon NPN Power Transistor — MJL4281A



DESCRIPTION

- High Collector-Emitter Breakdown Voltage
  : $V_{(BR)CEO}$= 350V(Min)
- High DC Current Gain
  :h_{FE} = 25 Min @ IC = 8 Adc
- Complement to Type MJL4302A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

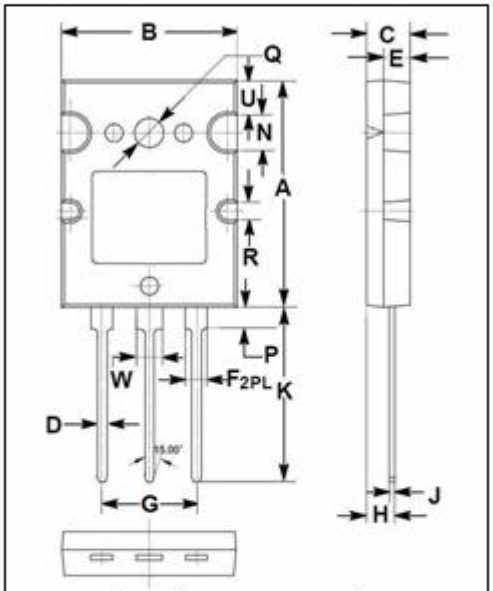
APPLICATIONS

- Perforated Emitter technology
- High power audio output,

disk head positioners linear applications

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	350	V
V_{CEO}	Collector-Emitter Voltage	350	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	1.5	A
P_C	Collector Power Dissipation @ T_C=25℃	230	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	25.50	26.50
B	19.80	20.20
C	4.50	5.50
D	0.90	1.10
E	2.80	3.20
F	2.40	2.60
G	10.80	11.00
H	3.10	3.30
J	0.50	0.70
K	20.00	21.00
N	3.90	4.50
P	2.40	2.60
Q	3.10	3.50
R	1.90	2.60
U	3.90	4.10
W	2.90	3.25

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 50mA; I_B= 0	350		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8.0A; I_B= 0.8A		1.0	V
$V_{BE(sat)}$	Emitter-Base Saturation Voltage	I_C= 8.0A; I_B= 0.8A		1.4	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 8A; V_{CE}= 5V		1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 200V; I_E= 0		100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0		5.0	μA
h_{FE-1}	DC Current Gain	I_C= 0.1A; V_{CE}= 5V	80	250	
h_{FE-2}	DC Current Gain	I_C= 1A; V_{CE}= 5V	80	250	
h_{FE-3}	DC Current Gain	I_C= 3A; V_{CE}= 5V	80	250	
h_{FE-4}	DC Current Gain	I_C= 5A; V_{CE}= 5V	80	250	
h_{FE-5}	DC Current Gain	I_C= 8A; V_{CE}= 5V	50		
h_{FE-6}	DC Current Gain	I_C= 15A; V_{CE}= 5V	10		