

isc Silicon NPN Power Transistor
MJL4281A
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DESCRIPTION

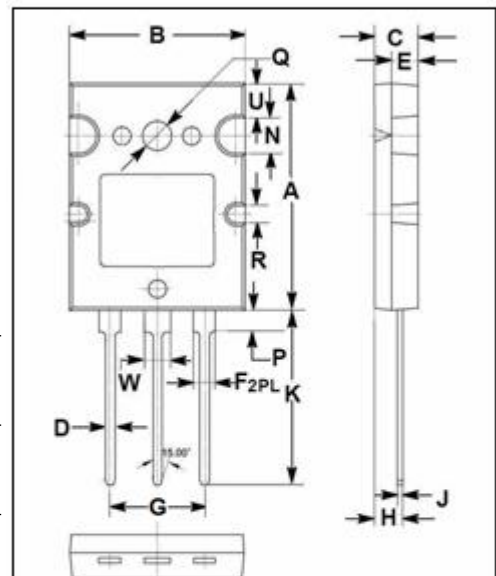
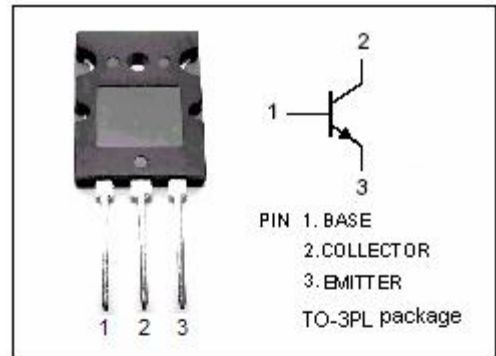
- High Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = 350V(\text{Min})$
- High DC Current Gain
: $h_{FE} = 25 \text{ Min @ } I_C = 8 \text{ A dc}$
- Complement to Type MJL4302A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Perforated Emitter technology
- High power audio output, disk head positioners linear applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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 @ $T_C=25^\circ\text{C}$	230	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



DIM	mm	
	MIN	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°C 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	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		5.0	μ A
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		

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