MOSPEC

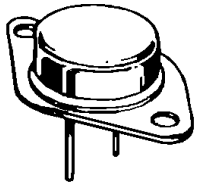
COMPLEMENTARY SILICON POWER TRANSISTORS

…designed for use in general-purpose amplifier and switching application.

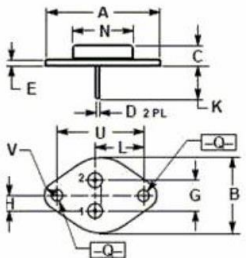
FEATURES
* Power Dissipation – P_C = 200W @Tc = 25℃
* DC Current Gain – hFE = 25~100 @Ic = 7.5A
* $V_{CE(SAT)}$ = 0.8V (max) @ Ic = 7.5A, I_B = 750mA

NPN
MJ802

30 AMPERES
COMPLEMENTARY
SILICON POWER
TRANSISTORS
100 VOLTS
200 WATTS



TO-3



PIN 1.BASE
2.EMITTER
COLLECTOR(CASE)

DIM	MILLIMETERS	
	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
O	4.00	4.20
U	30.00	30.20
V	4.30	4.50

MAXIMUM RATINGS

Rating	Symbol	MJ802	Unit
Collector-Emitter Voltage	V_{CEO}	90	V
Collector-Base Voltage	V_{CBO}	100	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Collector Current-Continuous	I_C	30	A
Base Current-Continuous	I_B	7.5	A
Collector Power Dissipation @ T_C=25°C	P_C	200	W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-65 to +200	℃

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance Junction to Case	$R_{th\ j\text{-}c}$	0.875	°C/W

ELECTRICAL CHARATERISTICS (T_C=25°C unless otherwise noted)

Characteristic	Symbol	Min.	Max	Unit
OFFCHARACTERISTICS				
Collector-Emitter Sustaining Voltage (I_C = 50 mA, I_B = 0)	$V_{CEO(SUS)}$	90		V
Collector Cutoff Current (V_{CB} = 100 V, I_E=0)	I_{CBO}		1.0	mA
Emitter Cutoff Current (V_{EB}= 4.0 V, I_C = 0)	I_{EBO}		1.0	mA
ON CHARACTERISTICS(1)				
DC Current Gain (I_C = 7.5 A, V_{CE} = 2.0 V)	h_{FE}	25	100	
Collector-Emitter Saturation Voltage (I_C = 7.5 A, I_B = 0.75 A)	$V_{CE(SAT)}$		0.8	V
Base-Emitter On Voltage (I_C =7.5 A, V_{CE} =2.0 V)	$V_{BE(ON)}$		1.3	V
Base-Emitter Saturation Voltage (I_C = 7.5 A, I_B = 0.75 A)	$V_{BE(SAT)}$		1.3	V
Current-Gain—Bandwidth Product I_C=1A;V_{CE}=10V;f=1.0MHz	f_T	2.0		MHz

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