multicomp

SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

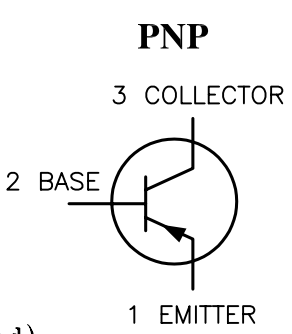
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1885	A	RELEASED	BYF	02/03/06	HO	2/6/06	JWM	2/6/06

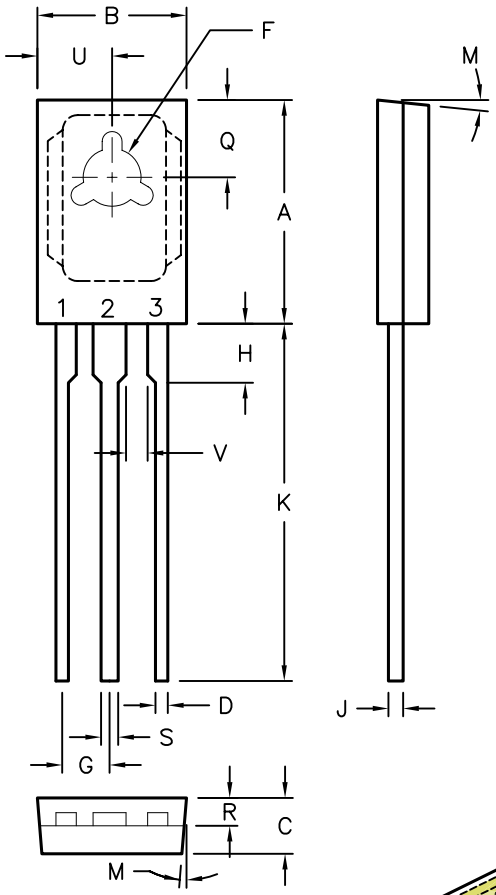
Description: Plastic, PNP, Silicon Power Transistorin A TO-126 PK Designed for low power audio amplifier and low current, high speed switching

RoHS Compliant

Absolute Maximum Ratings:

- Collector-Base Voltage, V_{CBO} = 100V
- Collector-Emitter Voltage, V_{CEO} = 80V
- Emitter-Base Voltage, V_{EBO} = 7V
- Continuous Collector Current, I_C = 3A
- Base Current, I_B =1 A
- Total Device Dissipation (T_C = +25°C), P_D = 1.5W
  Derate above 25°C = 0.012W/°C
- Operating Junction Temperature Range, T_J = −65°C to +150°C
- Storage Temperature Range, T_{stg} = −65°C to +150°C





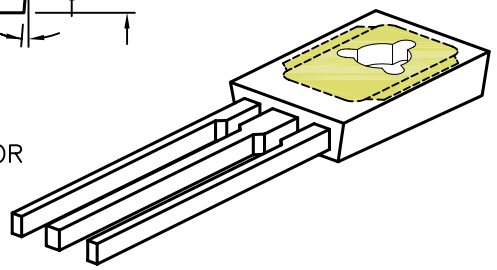
Dim	Min	Max
A	10.80	11.05
B	7.49	7.75
C	2.41	2.67
D	0.51	0.66
F	2.92	3.18
G	2.31	2.46
H	1.27	2.41
J	0.38	0.64
K	15.11	16.64
M	3° TYP	
Q	3.76	4.01
R	1.14	1.40
S	0.64	0.89
U	3.68	3.94
V	1.02	–

Electrical Characteristics: (T_C= +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
OFF Characteristics					
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA, I_B = 0	80	–	V
Collector Cut-Off Current	I_{CBO}	V_{CB} = 100V, I_E = 0	–	0.1	µA
Emitter Cut-Off Current	I_{EBO}	V_{EB} = 7V, I_C = 0	–	0.1	µA
ON Characteristics					
DC Current Gain	h_{FE}	V_{CE} = 1V, I_C = 100 mA	50	250	–
		V_{CE} = 1V, I_C = 500 mA	30	–	–
		V_{CE} = 1V, I_C = 1.5A	12	–	–
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 500mA, I_B = 50mA	–	0.3	V
		I_C = 1.5A, I_B = 150mA	–	0.9	V
			–	1.7	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 1.5A, I_B = 150mA	–	1.5	V
		I_C = 3A, I_B = 600MA	–	2	V
Base-Emitter On Voltage	$V_{BE(on)}$	I_C = 500mA, V_{CE} =1V	–	1.2	V
Small-Signal Characteristics					
Current Gain-Bandwidth Product (Note 1)	f_T	V_{CE} = 10V , I_C = 100mA, f = 10MHz	50	–	MHz
Output Capacitance	C_{obo}	V_{CB} = 10V, I_E = 0, f = .1MHz	–	60	pF

Note 1, $f_T = h_{FE} \cdot f_{TEST}$

STYLE 1
PIN 1. EMITTER
2. COLLECTOR
3. BASE



TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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DRAWING TITLE: Low Power Transistor, Silicon, Plastic, TO-126PK, PNP

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MJE172	01H0844.DWG	A

SCALE: NTS | U.O.M.: MILLIMETERS | SHEET: 1 OF 1