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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 Transistor in A TO-126 PK Designed for low power audio amplifier and low current, high speed switching

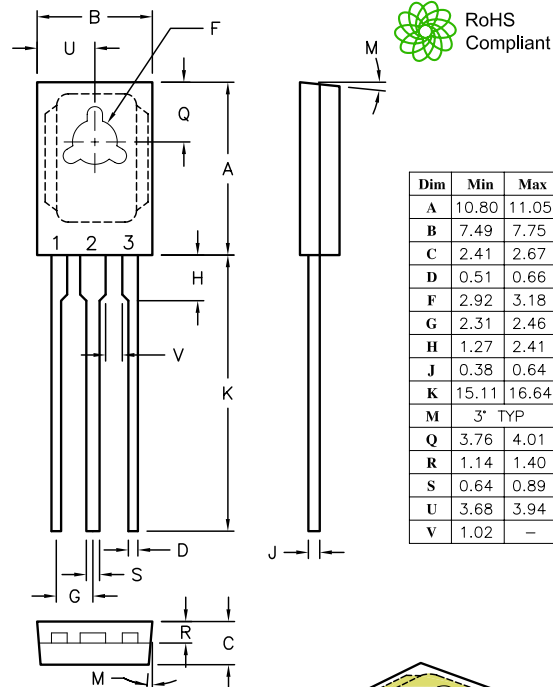
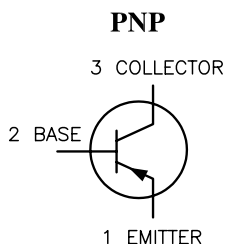
Absolute Maximum Ratings:

- 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 ($T_C = +25^\circ C$), $P_D = 1.5W$
Derate above $25^\circ C = 0.012W/^\circ C$
- Operating Junction Temperature Range, $T_J = -65^\circ C$ to $+150^\circ C$
- Storage Temperature Range, $T_{stg} = -65^\circ C$ to $+150^\circ C$

Electrical Characteristics: ($T_C = +25^\circ C$ unless otherwise specified)

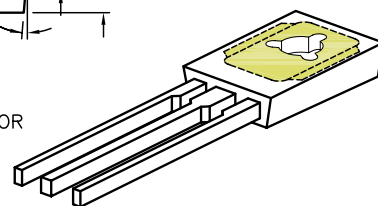
Parameter	Symbol	Test Conditions	Min	Max	Unit
OFF Characteristics					
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	80	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 100V, I_E = 0$	-	0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 7V, I_C = 0$	-	0.1	μA
ON Characteristics					
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
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, $f_T = h_{FE} f_{TEST}$



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	-

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



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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	