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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	EO	02/03/06	HO	2/6/06	JWM	2/6/06



RoHS Compliant

Description: Silicon TO-126, PNP Power Transistor for use in power amplifier and switching excellent safe area limits.

Absolute Maximum Ratings:

- Collector-Base Voltage, $V_{CB0} = 80V$
- Collector-Emitter Voltage, $V_{CEO} = 80V$
- Emitter-Base Voltage, $V_{EBO} = 5V$
- Continuous Collector Current, $I_C = 4A$
- Base Current = 1A
- Total Device Dissipation ($T_C = +25^\circ C$), $P_D = 40W$
Derate above $25^\circ C = 320mW/^\circ C$
- Operating Junction Temperature Range, $T_J = -65^\circ$ to $+150^\circ C$
- Storage Temperature Range, $T_{stg} = -65^\circ$ to $+150^\circ C$

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

Parameter	Symbol	Test Conditions	Min	Max	Unit
OFF Characteristics					
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100mA, I_B = 0, (Note 1)$	80	-	V
Collector Cut-Off Current	I_{CEO}	$V_{CE} = 80V, I_E = 0$		1	mA
Collector Cut-Off Current	I_{CEX}	$V_{CE} = 80V, V_{EB(off)} = 1.5V$	-	0.1	mA
	I_{CBO}	$V_{CB} = 80V, I_E = 0$	-	0.1	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	-	1	mA

ON Characteristics

DC Current Gain (Note 1)	h_{FE}	$V_{CE} = 2V, I_C = 1.5A$	20	80	-
		$V_{CE} = 2V, I_C = 4A$	7	-	-
Collector-Emitter Saturation Voltage (Note 1)	$V_{CE(sat)}$	$I_C = 1.5A, I_B = .15mA$	-	0.6	V
		$I_C = 4A, I_B = 1A$	-	1.4	V
Base-Emitter On Voltage (Note 1)	$V_{BE(on)}$	$I_C = 1.5A, V_{CE} = 2V$		1.2	V

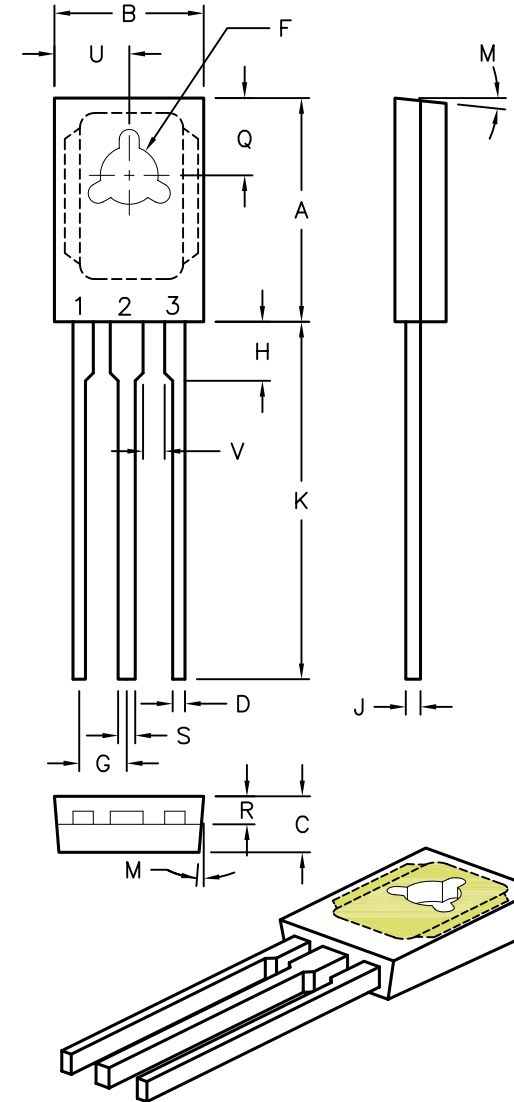
Small-Signal Characteristics

Current Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 1A, f = 1MHz$	2	-	MHz
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Note 1. Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.

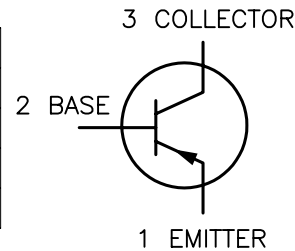
PNP

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



DISCLAIMER: ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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DRAWING TITLE: Transistor, Bipolar, Plastic, TO-126, PNP			
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	2N5195	01H1379.DWG	A
SCALE: NTS	U.O.M.: MILLIMETERS	SHEET: 1 OF 1	