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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
1447	A	RELEASED	HO	3/24/04	SF	8/12/04	JC	8/16/04
1885	B	UPDATED TO ROHS COMPLIANCE	EO	02/03/06	HO	2/6/06	HO	2/6/06

Description: This TO-126 plastic silicon epitaxial base PNP power transistor is intended for use in medium power linear and switching applications

Absolute Maximum Ratings:

- Collector-Base Voltage, $V_{CBO} = 45V$
- Collector-Emitter Voltage, $V_{CEO} = 45V$
- Emitter-Base Voltage, $V_{EBO} = 5V$
- Continuous Collector Current, $I_C = 4A$
- Base Current, $I_B = 1A$
- Total Device Dissipation ($T_C = +25^\circ C$), $P_D = 36W$
- 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: ($T_A = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
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OFF Characteristics

Collector-Emitter Breakdown Voltage, Note 1	$V_{(BR)CEO}$	$I_C = 100mA, I_B = 0$	45	—	V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 45V, I_E = 0$	—	100	μA
	I_{CES}	$V_{CE} = 45V, V_{BE} = 0$	—	100	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	1	mA

ON Characteristics, Note 1

DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 10mA,$	30	—	—
		$V_{CE} = 1V, I_C = 500mA$	85	—	—
		$V_{CE} = 1V, I_C = 2A,$	40	—	—
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.2A,$	—	0.6	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 2A, V_{CE} = 1V,$	—	1.2	V

Small-Signal Characteristics

Current Gain-Bandwidth Product	f_T	$V_{CE} = 1V, I_C = 250mA,$	3	—	MHz
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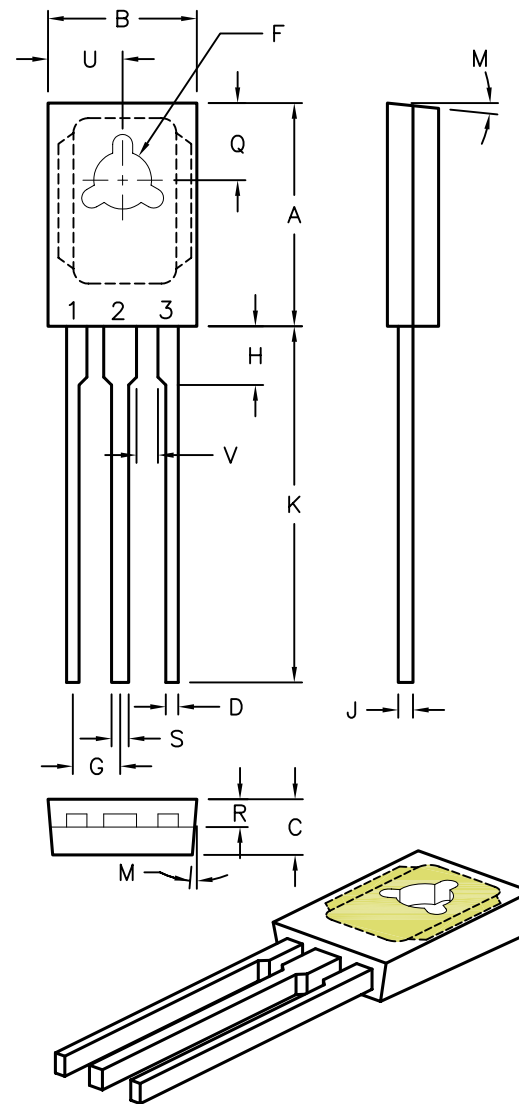
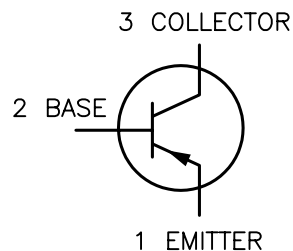
Note 1. Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 1.5\%$.

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, Power, Plastic, TO-126, PNP

SIZE

A

DWG. NO.

BD438

ELECTRONIC FILE

01H0330.DWG

REV

B

SCALE: NTS

U.O.M.: MILLIMETERS

SHEET: 1 OF 1