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
1262	A	RELEASED	HO	9/9/02	JWM	9/9/02	DJC	9/9/02
1885	B	UPDATED TO ROHS COMPLIANT	EO	02/04/06	HO	2/6/06	HO	2/6/06

Absolute Maximum Ratings:

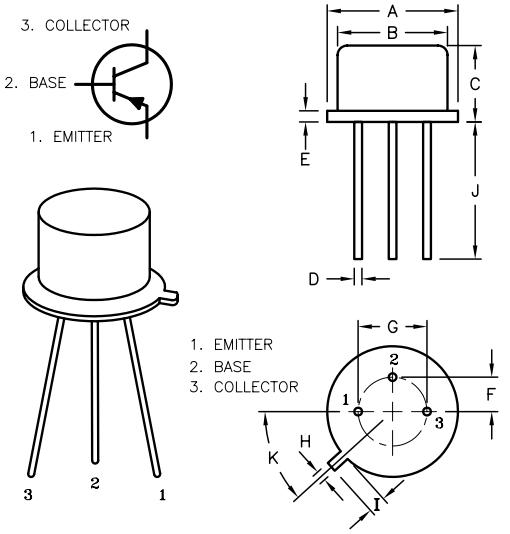
- Collector-Emitter Voltage, V_{CEO} = 300V
- Collector-Base Voltage, V_{CBO} = 350V
- Emitter-Base Voltage, V_{EBO} = 6V
- Continuous Collector Current, I_C = 1A
- Base Current, I_B = 500mA
- Total Device Dissipation (T_C = +25°C, Note 1), P_D = 10W
  Derate above 25°C = 57mW/°C
- Operating Junction Temperature Range, T_J = −65° to +200°C
- Storage Temperature Range, T_{stg} = −65° to +200°C
- Thermal Resistance, Junction-to-Case, R_{thJC} = 17.5°C/W
- Thermal Resistance, Junction-to-Ambient, R_{thJA} = 150°C/W

RoHS Compliant

Electrical Characteristics: (T_A = +25°C Unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	I_C = 50mA, I_B = 0, Note 1	300	–	–	V
Collector Cutoff Current	I_{CBO}	V_{CB} = 280V, I_E = 0	–	–	50	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 6V, I_C = 0	–	–	20	µA
ON Characteristics, Note 1						
DC Current Gain	h_{FE}	I_C = 50mA, V_{CE} = 10V	30	–	120	–
Small-Signal Characteristics						
Output Capacitance	C_{obo}	V_{CB} = 10V, I_E = 0, f = 1MHz	–	–	15	pF
Input Capacitance	C_{ibo}	V_{CB} = 5V, I_C = 0, f = 1MHz	–	–	75	pF
Small-Signal Current Gain	h_{fe}	I_C =10mA, V_{CE} =10V, f =5MHz	25	–	–	–
Real Part of Input Impedance	$Re(h_{ie})$	V_{CE} =10V, I_C =5mA, f =1MHz	–	–	300	Ohm

Note 1. Pulse Test: Pulse Width ≤300µs, Duty Cycle ≤ 1%.
CAUTION: The sustaining voltage must not be measured on a curve tracer.



Dimensions	A	B	C	D	E	F	G	H	I	J	K
Min.	8.5	7.74	6.09	0.40	–	2.41	4.82	0.71	0.73	12.7	42°
Max.	9.39	8.5	6.60	0.53	0.88	2.66	5.33	0.86	1.02	–	48°

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: General Purpose Transistor, TO-39, PNP

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	2N5416	35C0726.DWG	B

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