multicomp

SPC-F005.DWG

REVISIONS

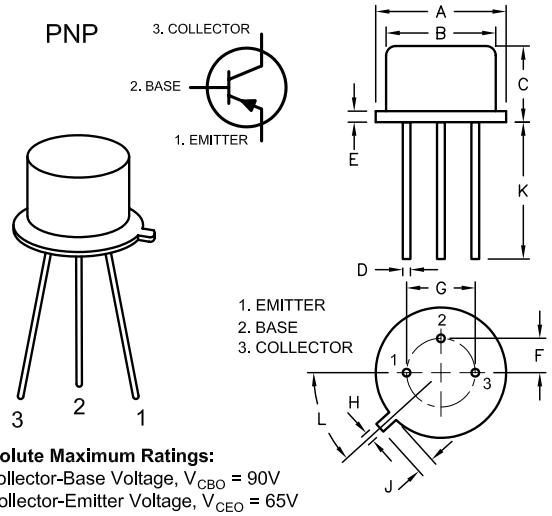
DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1447	A	RELEASED	HYO	6/11/02	JWM	2/20/04	JC	2/20/04
1885	B	UPDATED TO ROHS COMPLIANCE	EO	02/03/06	HO	2/6/06	HO	2/6/06

Dimensions	A	B	C	D	E	F	G	H	J	K	L
Min.	8.50	7.74	6.09	0.40	-	2.41	4.82	0.71	0.73	12.70	42°
Max.	9.39	8.50	6.60	0.53	0.88	2.66	5.33	0.86	1.02	-	48°

RoHS Compliant

This is a silicon PNP transistor in a TO-39 type case designed primarily for amplifier and switching applications. This device features high breakdown voltage, low leakage current, low capacity, and beta useful over an extremely wide current range.



Absolute Maximum Ratings:

1. Collector-Base Voltage, V_{CBO} = 90V
2. Collector-Emitter Voltage, V_{CEO} = 65V
3. Emitter-Base Voltage, V_{EBO} = 7V
4. Continuous Collector Current, I_C = 1A
5. Total Device Dissipation (T_A = +25°C), P_D = 1W
   Derate above 25°C = 5.72mW/°C
6. Total Device Dissipation (T_C = +25°C), P_D = 5W
   Derate above 25°C = 28.6mW/°C
7. Operating Junction Temperature Range, T_J = -65° to +200°C
8. Storage Temperature Range, T_{stg} = -65° to +200°C
9. Thermal Resistance, Junction-to-Case, R_{thJC}: 35°C
10. Lead temperature (During Soldering, 1/16" from case, 60sec max), T_L: 300°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100mA, I_B = 0	65	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	7	-	-	V
Collector Cut-Off Current	I_{CBO}	V_{CB} = 90V, I_E = 0	-	-	100	μA
Emitter Cut-Off Current	I_{EBO}	V_{BE} = 7V, I_C = 0	-	-	10	μA
ON Characteristics, Note 1						
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 100μA	20	-	-	-
		V_{CE} = 2V, I_C = 150mA	20	-	200	-
		V_{CE} = 10V, I_C = 500mA	20	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 150mA, I_B = 15mA	-	-	0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 150mA, I_B = 15mA	-	-	1.4	V
Small-Signal Characteristics						
Small-Signal Current Gain	h_{fe}	V_{CE} = 10V, I_C = 50mA, f = 20MHz	1	-	-	-
Switching Characteristics						
Storage Time	t_s	I_{B2}=15mA	-	-	600	nS
Turn-On Time	t_{on}	I_{B1}=I_{B2}	-	-	110	nS
Fall Time	t_f	I_{B2}=15mA	-	-	100	nS

Note 1. Pulse Test: Pulse Width ≤300μs, Duty Cycle ≤1%.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
HISHAM ODISH	6/11/02
CHECKED BY:	DATE:
JEFF MCVICKER	2/20/04
APPROVED BY:	DATE:
JOHN COLE	2/20/04

DRAWING TITLE: Transistor, Bipolar, Metal, TO-39, PNP

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	2N4036	35C0711.DWG	B

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