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	1/30/04	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

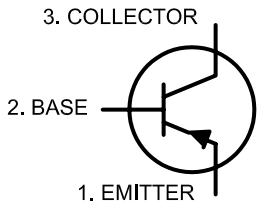
Description: The 2N3637 PNP silicon epitaxial planer transistors in a TO-39 type package designed for use as drivers for high power transistors in general purpose amplifier and switching circuits.

RoHS Compliant

Absolute Maximum Ratings:

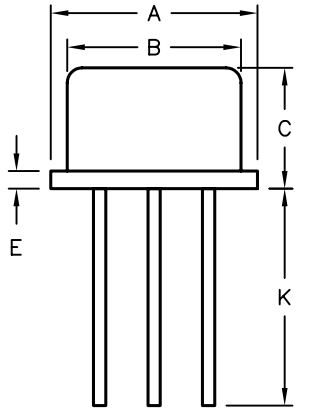
- Collector-Emitter Voltage, V_{CEO}= 175V
- Collector-Base Voltage (I_E = 0), V_{CBO}= 175V
- Emitter-Base Voltage (I_C = 0), V_{EBO}= 5V
- Collector Current, I_C= 1A
- Total Device Dissipation (T_C = +25°C), P_{tot}= 5W
- Total Device Dissipation (T_A = +25°C), P_{tot}= 1W
- Operating Junction Temperature, T_J= +200°C
- Storage Temperature Range, T_{stg}= -65°C to +200°C
- Thermal Resistance, Junction-to-Case, R_{thJC}= 35°C/W
- Thermal Resistance, Junction-to-Ambient, R_{thJA}= 175°C/W

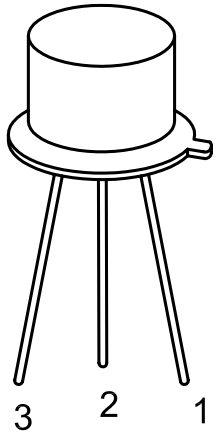
Dimensions	A	B	C	D	E	F	G	H	J	K	L
Min.	8.50	7.74	6.09	0.40	-	2.41	4.82	0.71	0.73	12.70	45°
Max.	9.39	8.50	6.60	0.53	0.88	2.66	5.33	0.86	1.02	-	48°

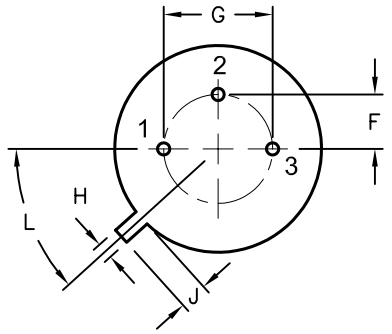


PNP

1. EMITTER
2. BASE
3. COLLECTOR







Electrical Characteristics: (T_C = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 100V, I_E = 0	-	0.1	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 3V, I_C = 0	-	0.05	µA
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	I_C = 10mA, I_B = 0, Note 1	175	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 10mA, I_B = 1mA, Note 1	-	0.3	V
		I_C = 50mA, I_B = 5mA, Note 1	-	0.5	V
Base-Emitter Voltage	$V_{BE(SAT)}$	V_{CE} = 5V, I_C = 50mA	0.65	0.9	V
DC Current Gain	h_{FE}	I_C = 150mA, V_{CE} = 10V, Note 1	50	-	
		I_C = 50mA, V_{CE} = 10V, Note 1	100	300	
Transition Frequency	f_T	V_{CE} = 30V, I_C = 30mA, f = 100MHz	200	-	MHz
Collector-Base Capacitance	C_{cbo}	V_{CB} = 20V, I_E = 0, f = 1MHz	-	10	pF
Small-Signal Current Gain	h_{fe}	V_{CE} = 10V, I_C = 10mA, f = 1kHz	80	320	

Note 1. Pulse Duration = 300µs, Duty Cycle ≤2%.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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HISHAM ODISH	1/30/04
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	2N3637	35C0705.DWG	B

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