multicomp

SPC-FD05.DWG

REVISIONS

DOC. NO. SPC-FD05 • Effective: 7/8/02 • DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1975	A	RELEASED	JN	05/02/08	JN	05/02/08	JN	05/02/08

Features:

High DC Current Gain
Collector-Emitter Sustaining Voltage: V[redacted] = 100V Min
Monolithic Construction with Built-in Base-Emitter Shunt Resistors
RoHS Compliant

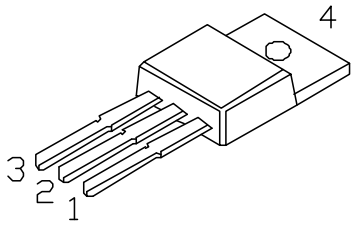
RoHS Compliant

Absolute Maximum Ratings:

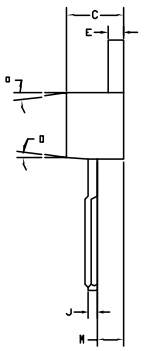
Collector-Emitter Voltage, V[redacted]	100V					
Collector-Base Voltage, V[redacted]	100V					
Emitter-Base Voltage, V[redacted]	5V					
Collector Current, I[redacted]	8A					
Continuous	16A					
Peak						
Base Current, I[redacted]	120mA					
Total Power Dissipation (T[redacted] = +25°C), P[redacted]	75W					
Derate above +25°C	.6W/°C					
Total Power Dissipation (T[redacted] = +25°C), P[redacted]	2.2W					
Derate above +25°C	.0175W/°C					
Operating Junction Temperature Range, T[redacted]	-65° to +150°C					
Storage Temperature Range, T[redacted]	-65° to +150°C					
Thermal Resistance, Junction-to-Case, R[redacted]	1.67°C/W					
Thermal Resistance, Junction-to-Ambient, R[redacted]	57°C/W					

Electrical Characteristics: (T[redacted] = +25°C unless otherwise specified)

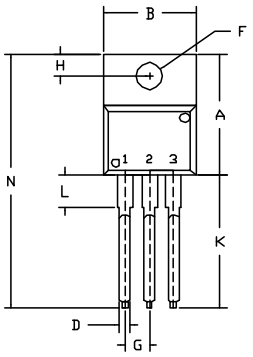
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector-Emitter Sustaining Voltage	V[redacted]	I[redacted] = 100mA, I[redacted] = 0, Note 1	100	-	-	V
Collector Cutoff Current	I[redacted]	V[redacted] = 100V, I[redacted] = 0	-	-	20	uA
	I[redacted]	V[redacted] = 100V, V[redacted] = 1.5V	-	-	20	µA
		V[redacted] = 100V, V[redacted] = 1.5V, T[redacted] = +150°C	-	-	0.2	mA
Emitter Cutoff Current	I[redacted]	V[redacted] = 5V, I[redacted] = 0	-	-	2	mA
ON Characteristics (Note 1)						
DC Current Gain	h[redacted]	V[redacted] = 4V, I[redacted] = 3A	1000	-	20000	
		V[redacted] = 4V, I[redacted] = 8A	100	-	-	
Collector-Emitter Saturation Voltage	V[redacted]	I[redacted] = 3A, I[redacted] = 12mA	-	-	2	V
		I[redacted] = 8A, I[redacted] = 80mA	-	-	4	V
Base-Emitter ON Voltage	V[redacted]	V[redacted] = 4V, I[redacted] = 4A	-	-	2.8	V
			-	-	-	
Dynamic Characteristics						
Small-Signal Current Gain	h[redacted]	V[redacted] = 4V, I[redacted] = 3A, f = 1MHz	4	-	-	
Output Capacitance	C[redacted]	V[redacted] = 10V, I[redacted] = 0, f = .1MHz	-	-	300	pF



PIN CONFIRGURATION
1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR



Dim	Min	Max
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	----	0.9
E	1.15	1.4
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	----	0.56
K	12.7	14.73
L	2.8	4.07
M	2.03	2.92
N	----	31.24
O	DEF 7	



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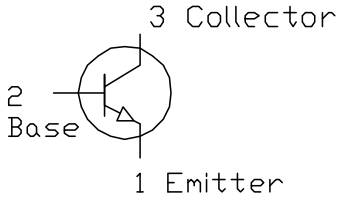

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jason Nash	05/02/08
CHECKED BY:	DATE:
Jason Nash	05/02/08
APPROVED BY:	DATE:
Jason Nash	05/02/08

DRAWING TITLE: SILICON TO220 PLASTIC NPN POWER TRANSISTOR

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	2N6042	35C0733.DWG	A

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