

Bipolar Transistor Chip MEM13003TZG

General Description

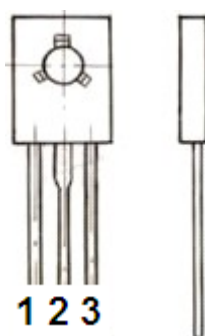
- Switching regulator application.
- High voltage and high speed.
- Switching application.

Features

- High Collector Voltage:700V
- Package:TO-126

Pin Configuration

Pin	Description
1	BASE(B)
2	COLLECTOR (C)
3	EMITTER(E)



Maximum Ratings (Ta=25℃)

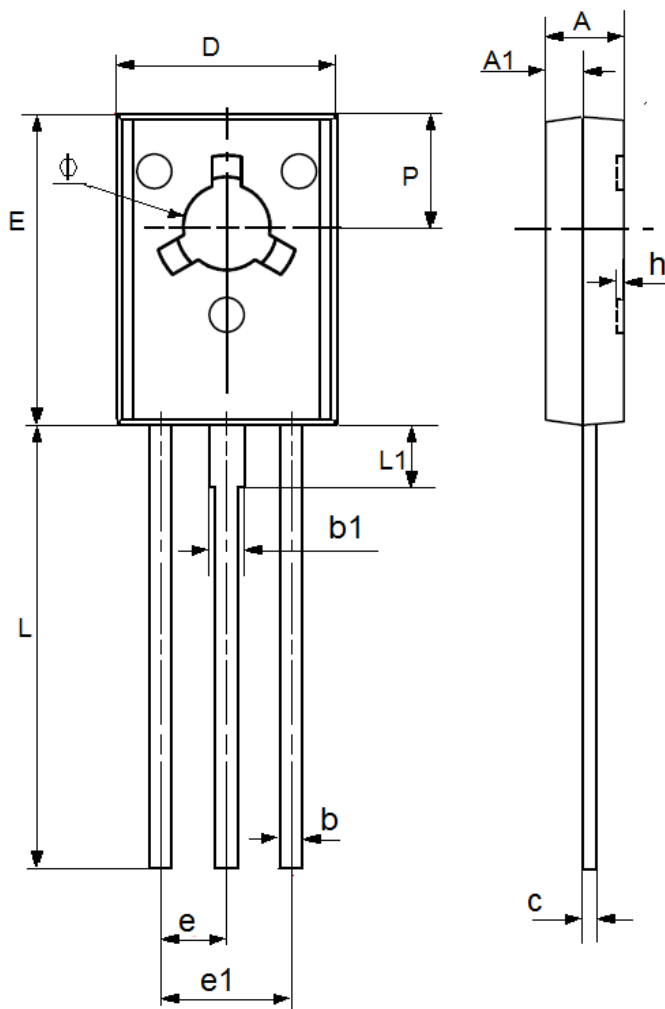
Characteristics		Symbol	Rating	Unit
Collector-Base Voltage		V_{CBO}	700	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	9	V
Collector Current	DC	I_C	1.5	A
	Pulse	I_{CP}	3	
Base Current		I_B	0.75	A
Collector Power Dissipation (Ta=25℃)		P_C	20	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-65~150	℃

Electrical Characteristics (Ta=25°C)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	700	-	-	V
$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	400	-	-	V
$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	9	-	-	V
I_{CBO}	$V_{CB}=700V, I_E=0$	-	-	1000	μA
I_{CEO}	$V_{CE}=400V, I_B=0$	-	-	100	μA
I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	10	μA
h_{FE}	$V_{CE}=10V, I_C=0.2A$	20	-	40	-
	$V_{CE}=5V, I_C=0.5A$	15	-	40	-
$V_{BE(sat)}$	$I_C=0.5A, I_{BE}=0.1A$	-	-	1	V
	$I_C=1A, I_{BE}=0.25A$	-	-	1.2	
$V_{CE(sat)}$	$I_C=1A, I_{BE}=0.25A$	-	-	1	V
	$I_C=1.5A, I_{BE}=0.5$	-	-	3	

Package Information

- Package Type: TO126



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	2.5	2.9	0.0984	0.1142
A1	1.1	1.5	0.0433	0.0591
b	0.76(TYP)		0.0299(TYP)	
b1	1.17	1.37	0.0461	0.0539
c	0.35	0.65	0.0138	0.0256
D	7.4	7.8	0.2913	0.3071
E	10.6	11	0.4173	0.4331
e	2.286(TYP)		0.09(TYP)	
e1	4.572(TYP)		0.18(TYP)	
L	15.3	15.95	0.6024	0.628
L1	2.1	2.3	0.0827	0.0906
h	0	0.3	0	0.0118
P	3.9	4.1	0.1535	0.1615
Φ	3.1(TYP)		0.122(TYP)	

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