



Micro Commercial Components



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MC78D05CDT

Three-Terminal Positive Voltage Regulators

Features

- Halogen free available upon request by adding suffix "-HF"
- Output current in excess of 1.0 Ampere
- Internal thermal overload protection
- Internal short-circuit current limiting
- High power dissipation capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

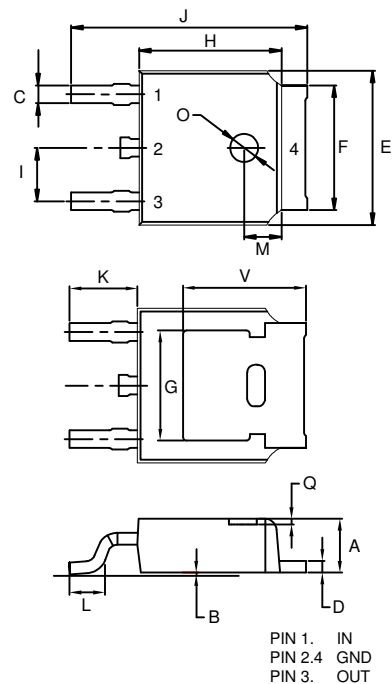
Maximum Ratings @ T_a=25°C, Unless Otherwise Noted

Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Power Dissipation	P _D	1.25	W
Operating Junction Temperature	T _{OPR}	0 ---+125	°C
Storage Temperature Range	T _{STG}	-55---+150	°C

Electrical Characteristics (V_i=10V, I_o=500mA, 0°C<T_j<125°C, C_i=0.33uF, C_o=0.1uF, Unless Otherwise Specified)

Parameter	Sym	Min	Typ	Max	Test conditions
Output Voltage	V _o	4.8V	5.0V	5.2V	T _j =25°C
		4.75V	5.0V	5.25V	8V ≤ V _i ≤ 20V, 5mA ≤ I _o ≤ 1000mA, P _D =15W
Load Regulation	ΔV _o			100mV	5mA ≤ I _o ≤ 1.0A, T _j =25°C
				50mV	250mA ≤ I _o ≤ 750mA, T _j =25°C
Line regulation	ΔV _o			100mV	7.5V ≤ V _i ≤ 20V, I _o =0.5A
				50mV	8V ≤ V _i ≤ 12V, I _o =0.5A
Quiescent Current	I _q			8.0mA	T _j =25°C
Quiescent Current Change	ΔI _q			0.8mA 0.5mA	8V ≤ V _i ≤ 25V, I _o =0.5A 5mA ≤ I _o ≤ 1000mA
Output Noise Voltage	V _N		42μV		10Hz ≤ f ≤ 100Hz
Ripple Rejection	RR	62dB			8V ≤ V _i ≤ 18V f=120Hz, I _o =0.3A T _j =25°C
Dropout Voltage	V _d	4.8V		5.2V	V _i =7V, I _o =1A
Output Short Circuit Current	I _{sc}		220mA		V _i =35V, T _a =25°C
Output Current	I _o		1.0A		T _j =25°C

DPAK



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		
H	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		



TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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