

MC78M12CDT

Features

- Output current in excess of 0.5 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

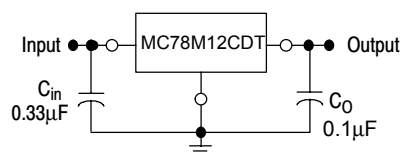
Maximum Ratings @ T_A=25°C, Unless Otherwise Noted

Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Operating Junction Temperature	T _{OPR}	0 ---+125	°C
Storage Temperature Range	T _{STG}	-65---+150	°C

Electrical Characteristics (V_i=19V, I_o=350mA, 0°C < T_j < 125°C, C_i=0.33µF, C_o=0.1µF, Unless Otherwise Specified)

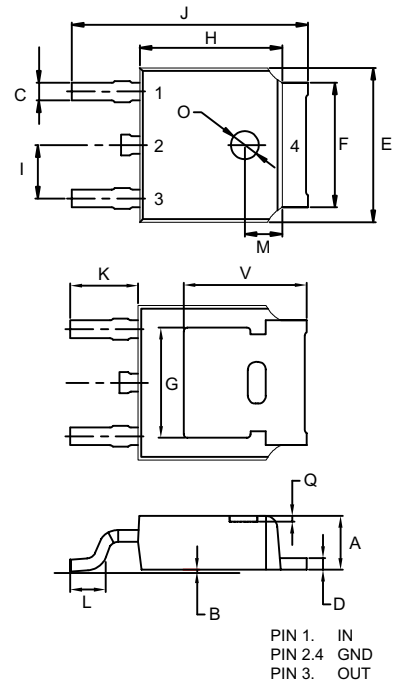
Parameter	Sym	Min	Typ	Max	Test conditions
Output Voltage	V _o	11.5V	12V	12.5V	T _j =25°C
		11.4V	12V	12.6V	14.5V ≤ V _i ≤ 27V, 5mA ≤ I _o ≤ 350mA, P _D ≤ 15W
Load Regulation	ΔV _o		25mV	240mV	5mA ≤ I _o ≤ 0.5A, T _j =25°C
			10mV	120mV	5mA ≤ I _o ≤ 200mA, T _j =25°C
Line regulation	ΔV _o		10mV	100mV	14.5V ≤ V _i ≤ 30V, I _o =0.2A
			3.0mV	50mV	16V ≤ V _i ≤ 30V, I _o =0.2A
Quiescent Current	I _q		4.6mA	6.0mA	T _j =25°C
Quiescent Current Change	ΔI _q			0.8mA 0.5mA	14.5V ≤ V _i ≤ 30V, I _o =0.2A 5mA ≤ I _o ≤ 350mA
Output Noise Voltage	V _N		75µV		10Hz ≤ f ≤ 100Hz
Ripple Rejection	RR		55dB	80dB	15V ≤ V _i ≤ 25V f=120Hz, I _o =0.3A T _j =25°C
Dropout Voltage	V _d		2.0V		I _o =0.35A, T _j =25°C
Output Short Circuit Current	I _{sc}		240mA		V _i =19V, T _j =25°C
Peak Output Current	I _{pk}		0.7A		T _j =25°C

TYPICAL APPLICATION



Three-Terminal Positive Voltage Regulators

DPAK



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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

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