

**Features**

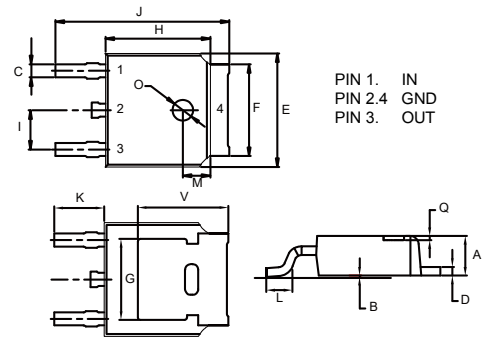
- Output Current in Excess of 1.0 Ampere
- Internal Thermal Overload Protection
- Internal Short-circuit Current Limiting
- High Power Dissipation Capability
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

**Maximum Ratings**

Parameter	Symbol	Value	Unit
Input Voltage	$V_I$	35	V
Power Dissipation	$P_D$	1.25	W
Operating Junction Temperature $T_{OJ}^*$	$T_{OPR}$	0~125	°C
Storage Temperature Range	$T_{STG}$	-55~150	°C
Thermal Resistance junction to Ambient	$R_{\theta JA}$	100	°C/W

**Three-Terminal Positive Voltage Regulators**

**DPAK(TO-252)**



DIM	INCHES		MM		NOTE
	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		TYP.
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		TYP.
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		TYP.
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		TYP.

**Electrical Characteristics**

 ( $V_i=10V$ ,  $I_o=500mA$ ,  $0^\circ C < T_j < 125^\circ C$ ,  $C_i=0.33\mu F$ ,  $C_o=0.1\mu F$ , Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	$V_o$	$T_j=25^\circ C$	4.8	5.0	5.2	V
		$8V \leq V_i \leq 20V$ , $5mA \leq I_o \leq 1000mA$ , $P_D=15W$	4.75	5.0	5.25	V
Load Regulation	$\Delta V_o$	$5mA \leq I_o \leq 1000mA$ , $T_j=25^\circ C$	-	-	100	mV
		$250mA \leq I_o \leq 750mA$ , $T_j=25^\circ C$	-	-	50	mV
Line Regulation	$\Delta V_o$	$7.5V \leq V_i \leq 20V$ , $I_o=0.5A$	-	-	100	mV
		$8.0V \leq V_i \leq 12V$ , $I_o=0.5A$	-	-	50	mV
Quiescent Current	$I_q$	$T_j=25^\circ C$	-	-	8.0	mA
Quiescent Current Change	$\Delta I_q$	$8V \leq V_i \leq 25V$ , $I_o=500mA$ , $5mA \leq I_o \leq 1000mA$	-	-	0.8	mA
			-	-	0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100Hz$	-	42	-	$\mu V$
Ripple Rejection	RR	$8V \leq V_i \leq 18V$ , $f=120Hz$ , $I_o=0.3A$ , $T_j=25^\circ C$	62	-	-	dB
Dropout Voltage	$V_d$	$V_i=7V$ , $I_o=1A$	4.8	-	5.2	V
Output Short Circuit Current	$I_{sc}$	$V_i=35V$ , $T_a=25^\circ C$	-	220	-	mA
Output Current	$I_o$	$T_j=25^\circ C$	-	1	-	A

## 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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