

FEATURE

- Low gate charge
- Low C_{iss}
- Fast switching
- 100% avalanche tested
- Improved dv/dt capability

Maximum output current

I_{OM} : 0.5 A

Output voltage

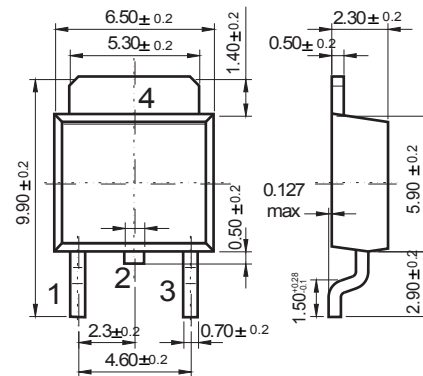
V_O : 12V

Continuous total dissipation

P_D : 1.25 W ($T_a = 25^\circ\text{C}$)

TO-252-2(DAPK)

Unit: mm



Dimensions in inches and (millimeters)

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	0-+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65-+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_i=19\text{V}, I_o=350\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	11.5	12	12.5	V
		$14.5 \leq V_i \leq 27\text{V}, I_o=5\text{mA}-350\text{mA}$ $P_o \leq 1.25\text{W}$	0-125 $^\circ\text{C}$	11.4	12	12.6
Load Regulation	ΔV_o	$I_o=5\text{mA}-500\text{mA}$	25°C	25	240	mV
		$I_o=5\text{mA}-200\text{mA}$	25°C	10	120	mV
Line Regulation	ΔV_o	$14.5\text{V} \leq V_i \leq 30\text{V}, I_o=200\text{mA}$	25°C	10	100	mV
		$16\text{V} \leq V_i \leq 30\text{V}, I_o=200\text{mA}$	25°C	3	50	mV
Quiescent Current	I_q	25°C		4.6	6	mA
Quiescent Current Change	ΔI_q	$14.5\text{V} \leq V_i \leq 30\text{V}, I_o=200\text{mA}$	0-125 $^\circ\text{C}$		0.8	mA
		$5\text{mA} \leq I_o \leq 350\text{mA}$	0-125 $^\circ\text{C}$		0.5	mA
Output Noise Voltage	V_N	10Hz $\leq f \leq 100\text{KHz}$	25°C	75		μV
Ripple Rejection	RR	$15 \leq V_i \leq 25\text{V}, f=120\text{Hz}, I_o=300\text{mA}$	0-125 $^\circ\text{C}$	55	80	dB
Dropout Voltage	V_d	$I_o=350\text{mA}$	25°C	2		V
Short Circuit Current	I_{sc}	$V_i=19\text{V}$	25°C	240		mA
Peak Current	I_{pk}	25°C		0.7		A

TYPICAL APPLICATION

