

FEATURE

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

output current
 I_{OM} : 0.5 A

Output voltage

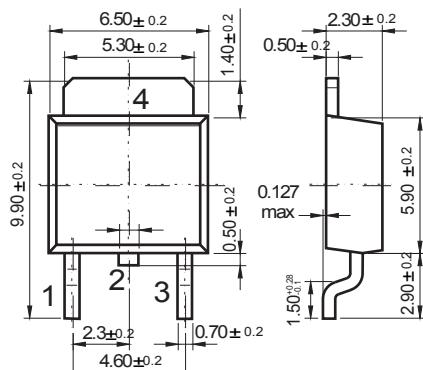
V_O : 5V

Continuous total dissipation

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

TO-252-2(DAPK)

Unit: mm



Dimensions in inches and (millimeters)

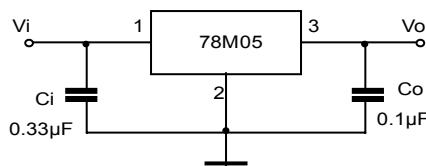
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	80	°C/W
Operating Junction Temperature Range	T_{OPR}	-25~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

 ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=10V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
			25°C	4.8	5	5.2	V
Output Voltage	V_o	7V≤ V_o ≤20V, $I_o=5mA-350mA$	-25~125°C	4.75	5	5.25	V
			25°C	4.8	5	5.2	V
Load Regulation	ΔV_o	$I_o=5mA-0.5A$	25°C	15	100	mV	
		$I_o=5mA-200mA$	25°C	5	50	mV	
Line Regulation	ΔV_o	7V≤ V_o ≤25V, $I_o=200mA$	25°C	3	100	mV	
		8V≤ V_o ≤25V, $I_o=200mA$	25°C	1	50	mV	
Quiescent Current	I_q		25°C	4.2	6	mA	
Quiescent Current Change	ΔI_q	8V≤ V_o ≤25V, $I_o=200mA$	-25~125°C		0.8	mA	
	ΔI_q	5mA≤ I_q ≤350mA	-25~125°C		0.5	mA	
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25°C	40	200	$\mu V/V_o$	
Ripple Rejection	RR	8V≤ V_o ≤18V, f=120Hz, $I_o=300mA$	-25~125°C	62	80	dB	
Dropout Voltage	V_d	$I_o=350mA$	25°C	2	2.5	V	
Short Circuit Current	I_{sc}	$V_o=10V$	25°C	300		mA	
Peak Current	I_{pk}		25°C	0.5		A	

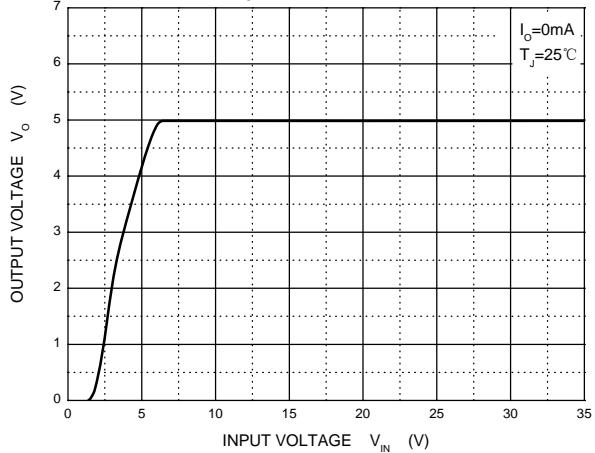
* Pulse test.

TYPICAL APPLICATION


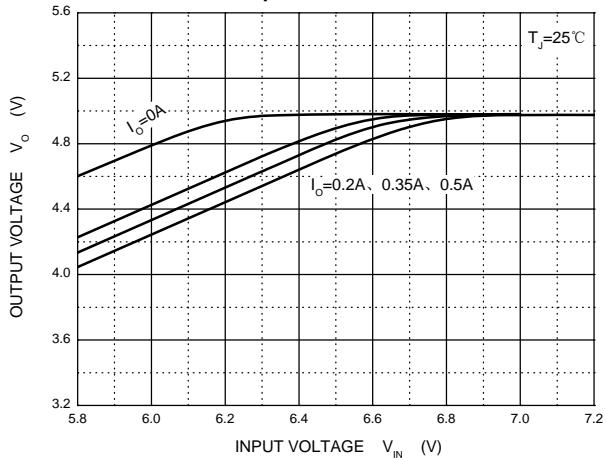
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

RATING AND CHARACTERISTIC CURVES (78M05)

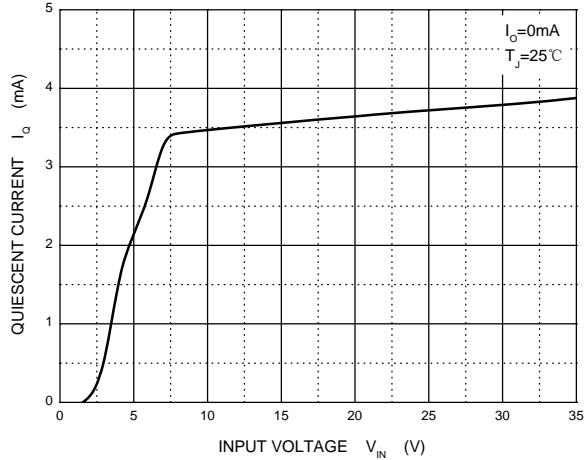
Output Characteristics



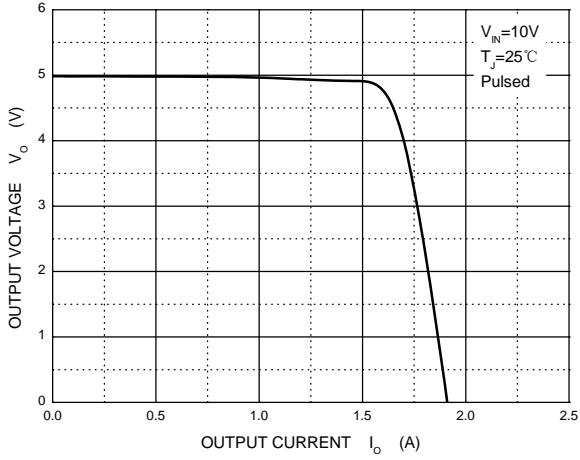
Dropout Characteristics



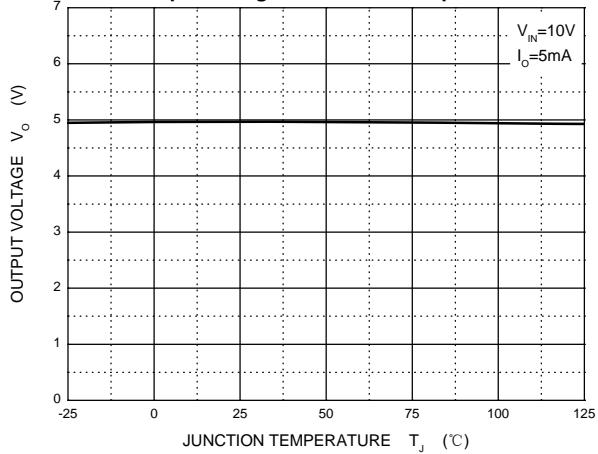
Quiescent Current



Current Cut-off Grid Voltage



Output Voltage vs Junction Temperature



Power Derating Curve

