

FEATURES

- Maximum Output current
 I_{OM} : 0.5 A
- Output voltage
 V_O : 5V
- Continuous total dissipation
 P_D : 1.25 W

TO-251
TO-252

1.IN

2.GND

3.OUT

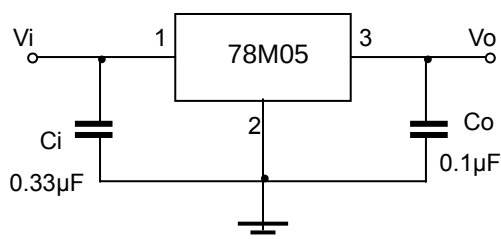
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

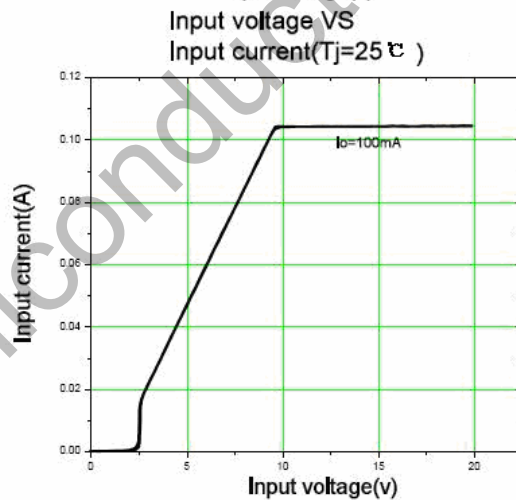
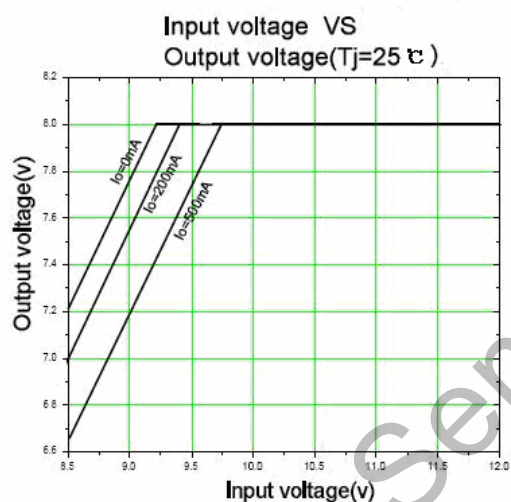
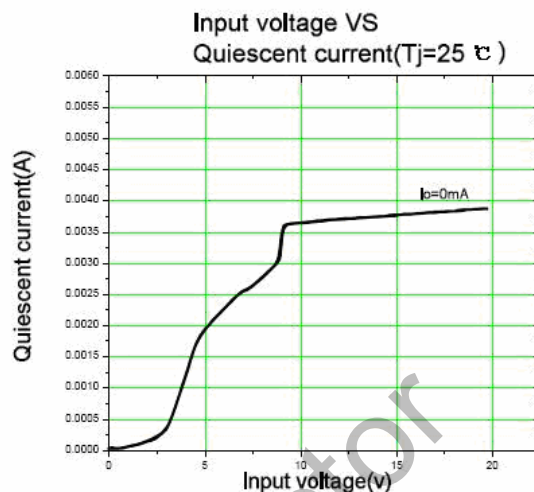
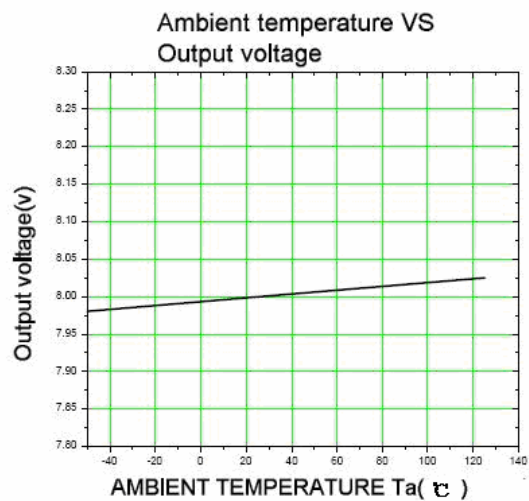
ELECTRICAL CHARACTERISTICS ($V_i=10V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT	
Output voltage	Vo		25°C	4.8	5	5.2	V
		7V≤Vi≤20V, Io=5mA-350mA Po≤ 15W	0-125°C	4.75	5	5.25	V
Load Regulation	ΔVo	Io=5mA-0.5A	25°C		15	100	mV
		Io=5mA-200mA	25°C		5	50	mV
Line regulation	ΔVo	7V≤Vi≤25V, Io=200mA	25°C		3	100	mV
		8V≤Vi≤25V, Io=200mA	25°C		1	50	mV
Quiescent Current	Iq		25°C		4.2	6	mA
Quiescent Current Change	ΔIq	8V≤Vi≤25V, Io=200mA	0-125°C			0.8	mA
	ΔIq	5mA≤Io≤350mA	0-125°C			0.5	mA
Output Noise Voltage	VN	10Hz≤ f ≤100KHz	25°C		40	200	uV
Ripple Rejection	RR	8V≤Vi≤18V,f=120Hz,Io=300mA	0-125°C	62	80		dB
Dropout Voltage	Vd	Io=350mA	25°C		2	2.5	V
Short Circuit Current	Isc	Vi=10V	25°C		300		mA
Peak Current	Ipk		25°C		0.5		A

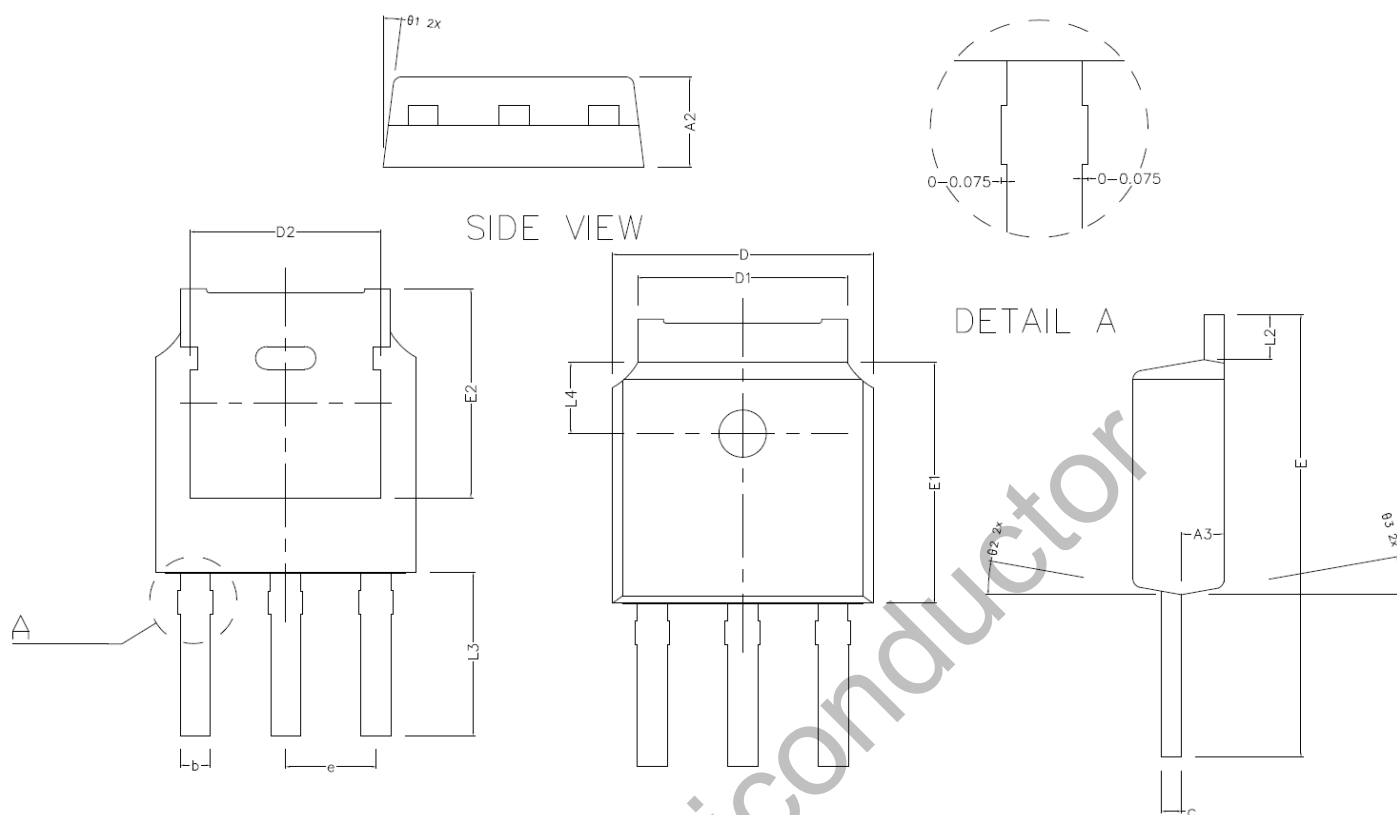
TYPICAL APPLICATION



Typical Characteristics



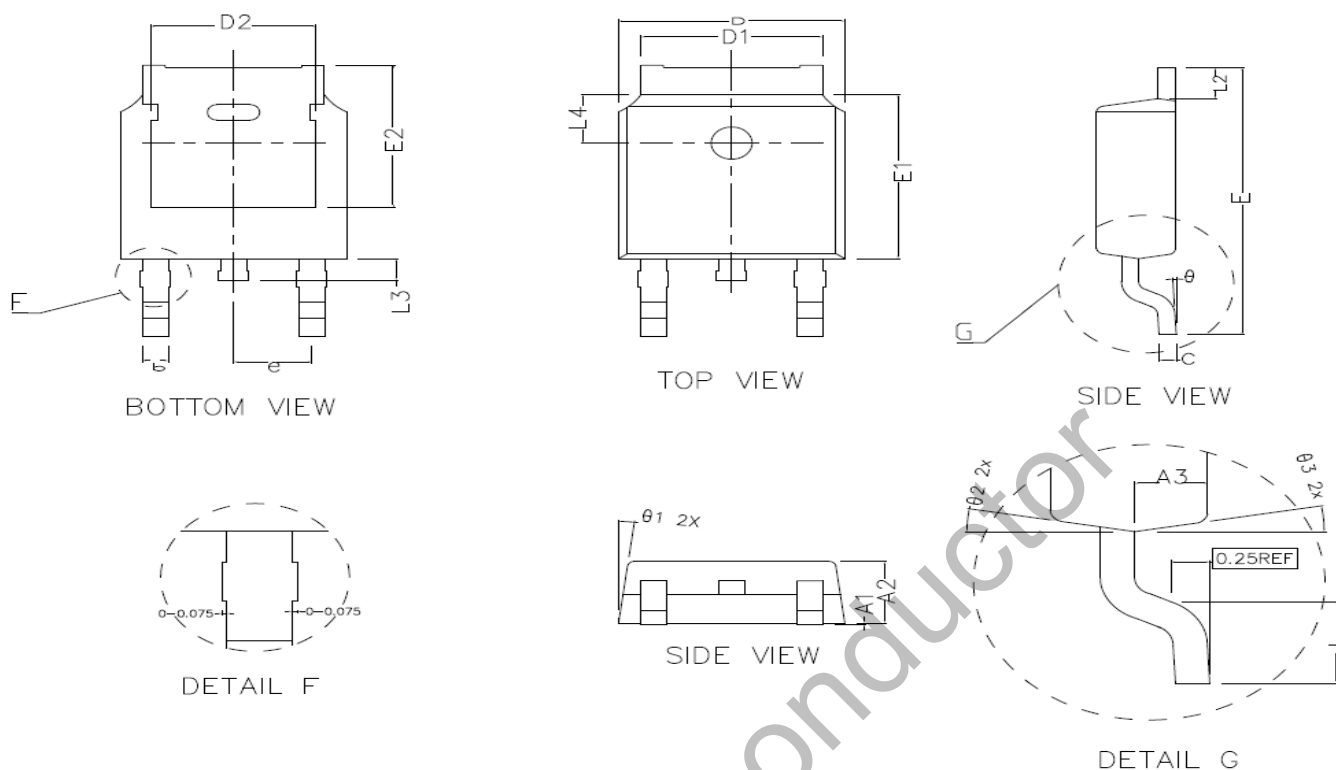
TO-251 Package Outline Dimensions (Units: mm)



COMMON DIMENSIONS
(UNITS OF MEASURE IS mm)

	MIN	NORMAL	MAX
A2	2.200	2.300	2.400
A3	1.020	1.070	1.120
b	0.710	0.760	0.810
c	0.460	0.508	0.550
D	6.500	6.600	6.700
D1	5.330REF		
D2	4.830REF		
E	9.900	10.100	10.300
E1	6.000	6.100	6.200
E2	5.60REF		
e	2.286TYPE		
L2	1.10REF		
L3	3.60REF		
L4	1.80REF		
θ_1	7° TYPE		
θ_2	10° TYPE		
θ_3	10° TYPE		

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E1	6.000	6.100	6.200
E2	5.600REF		
e	2.286TYPE		
L	1.400	1.550	1.700
L2	1.10REF		
L3	0.80REF		
L4	1.80REF		
θ	0~8°		
θ_1	7° TYPE		
θ_2	10° TYPE		
θ_3	10° TYPE		