



Three Terminal Voltage Regulators

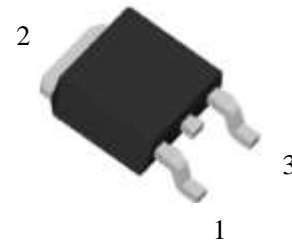
三端稳压管

78M05A

产品特性 Features

输出电压 Output Voltage	5V
最大输出电流 Max Output Current	0.5A
过载保护 Internal thermal overload protection	
短路电流限制 Internal short-current limiting	
输出端最大安全工作区域 Output transistor safe-area compensation	

封装形式 Package



1:Input 2:GND 3:Output

绝对最大额定值 Absolute Maximum Rating (Ta = 25°C unless otherwise noted)

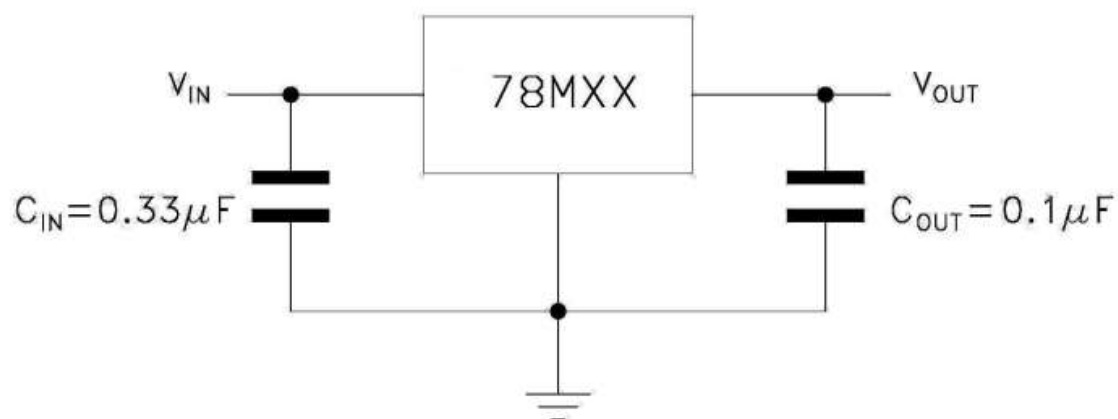
Parameter 项目	Symbol 符号	Limit 极限值	Unit
输入电压 Input Voltage	Vin	35	V
结温 Junction Temperature	Tj	+125	°C
存储温度 Storage Temperature Range	TSTG	-65~+150	°C
结-壳的热阻 Thermal Resistance -Junction to Case	ReJC	8	°C/W
结-环境的热阻 Thermal Resistance -Junction to Ambient	ReJA	100	°C/W

电参数特性 Electrical Characteristics

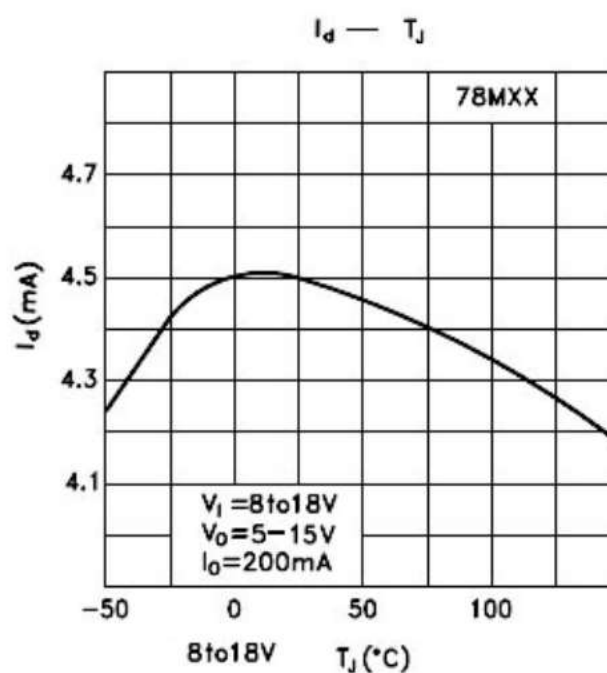
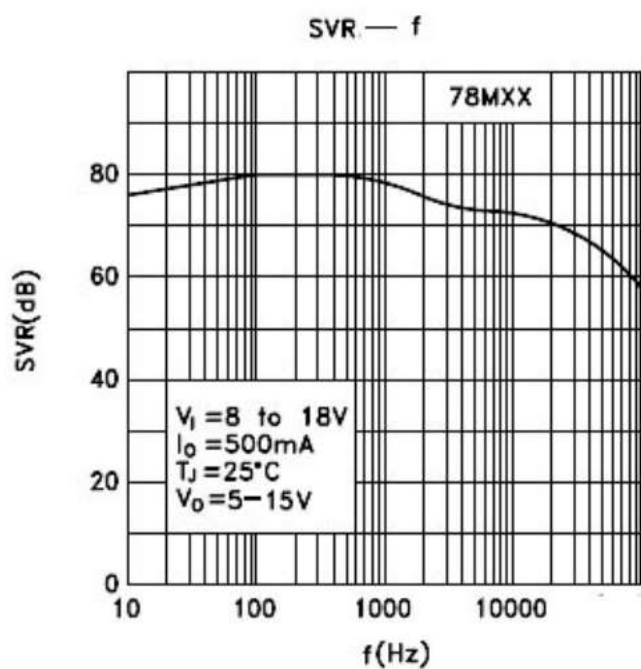
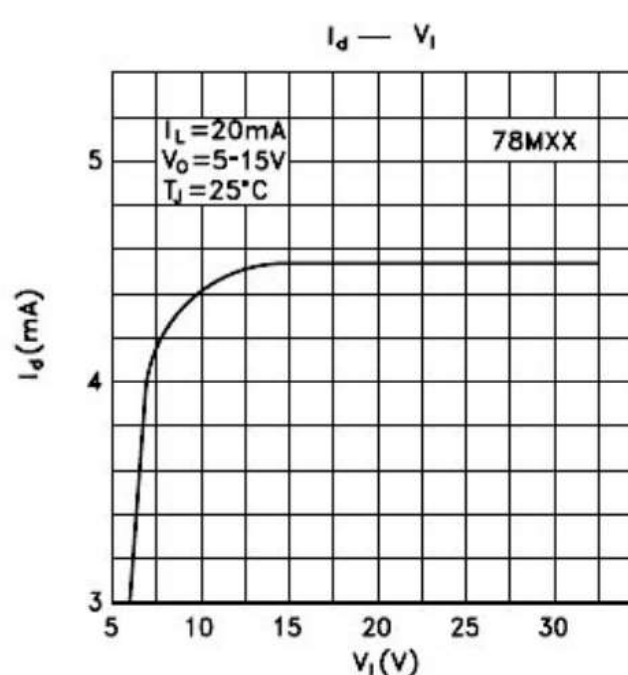
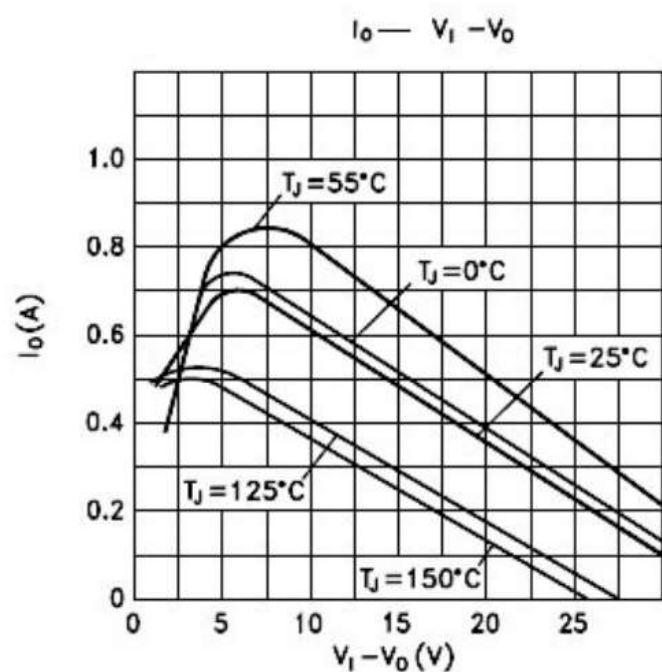
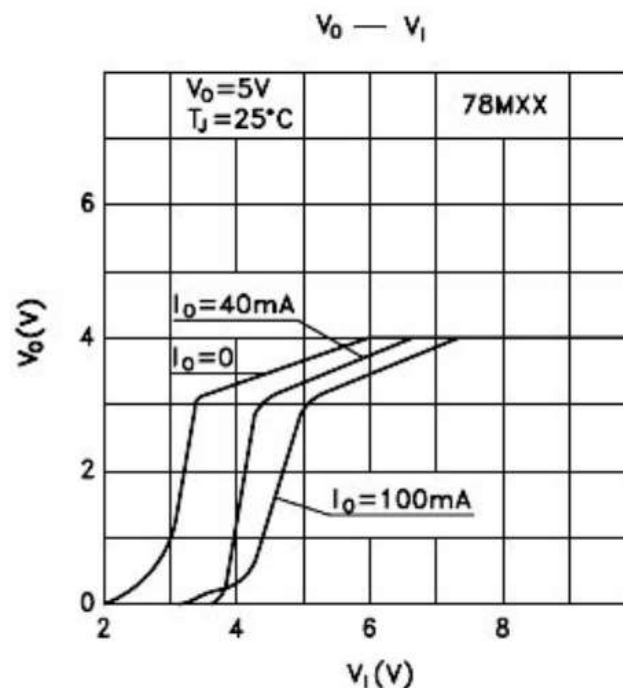
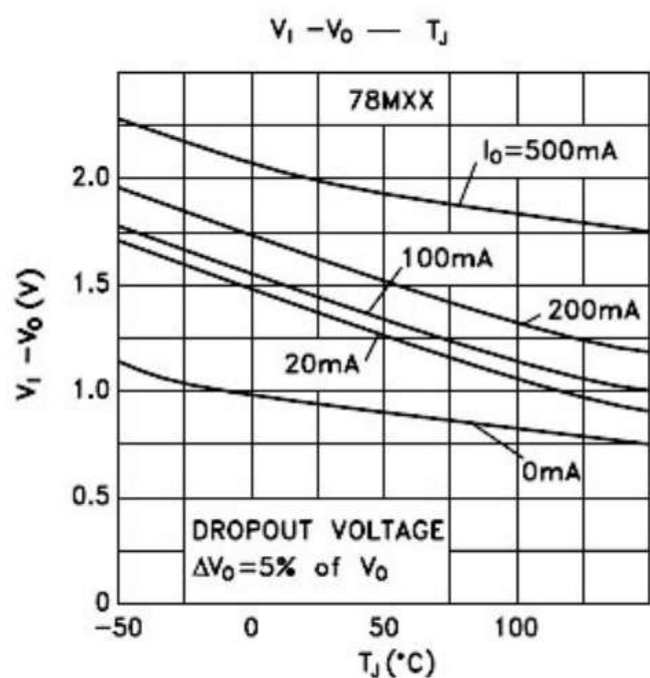
(Vin= 10V, Iout=350mA, 0°C ≤ Tj ≤ 125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
输出电压 Output voltage	Vout	Tj=25°C	4.80	5	5.20	V
		7.5V ≤ Vin ≤ 20V, 5mA ≤ Iout ≤ 350mA,	4.75	5	5.25	
线性调节 Line Regulation	REGline	Tj=25°C				mV
		7.0V ≤ Vin ≤ 25V	--	4	100	
		8V ≤ Vin ≤ 25V	--	2	50	
负载调节 Load Regulation	REGload	Tj=25°C				mV
		5mA ≤ Iout ≤ 500mA	--	25	100	
		5mA ≤ Iout ≤ 200mA	--	10	50	
静态电流 Quiescent Current	Iq	Iout=0, Tj=25°C	--	4.5	8	mA
静态电流变化 Quiescent Current Change	ΔIq	8.0V ≤ Vin ≤ 25V	--	--	0.5	
输出电压纹波 Output Noise Voltage	eN	10Hz ≤ f ≤ 100KHz, Tj=25°C	--	50	--	μV
浪涌衰减 Ripple Rejection Ratio	RR	f=120Hz, 8V ≤ Vin ≤ 18V	60	67	--	dB
衰减电压 Voltage Drop	Vdrop	Tj=25°C	--	1.7	--	V
输出电压特性 Temperature Coefficient of Output Voltage	ΔVout/ ΔTj	Iout=5mA, 0°C ≤ Tj ≤ 125°C	--	-0.5	--	mV/°C

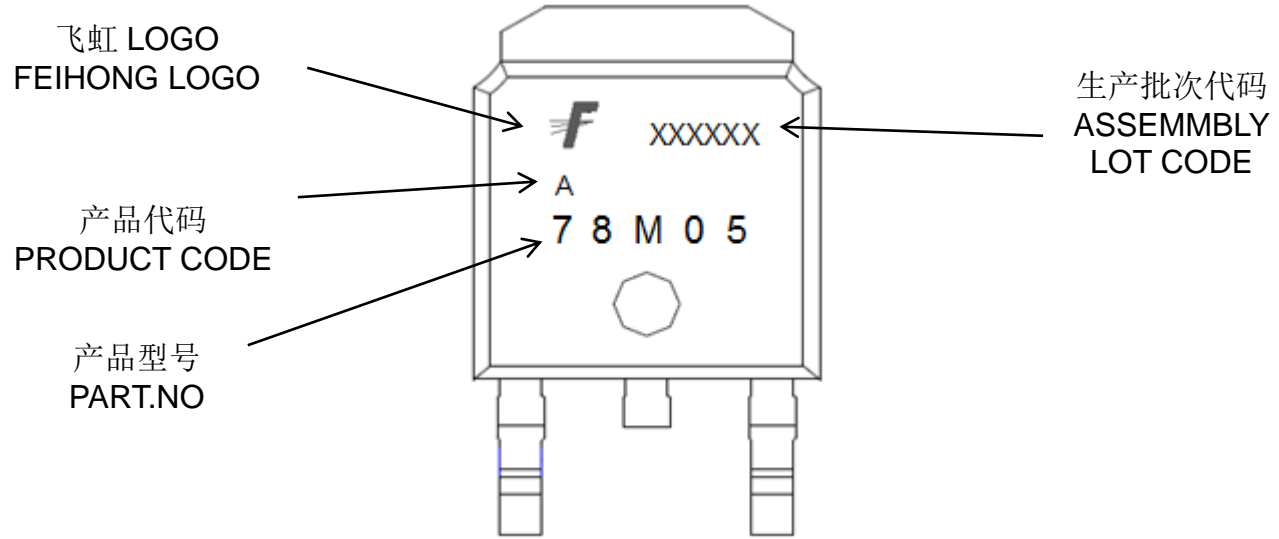
测试电路 Test Circuits



典型特性曲线 Typical performance characteristics



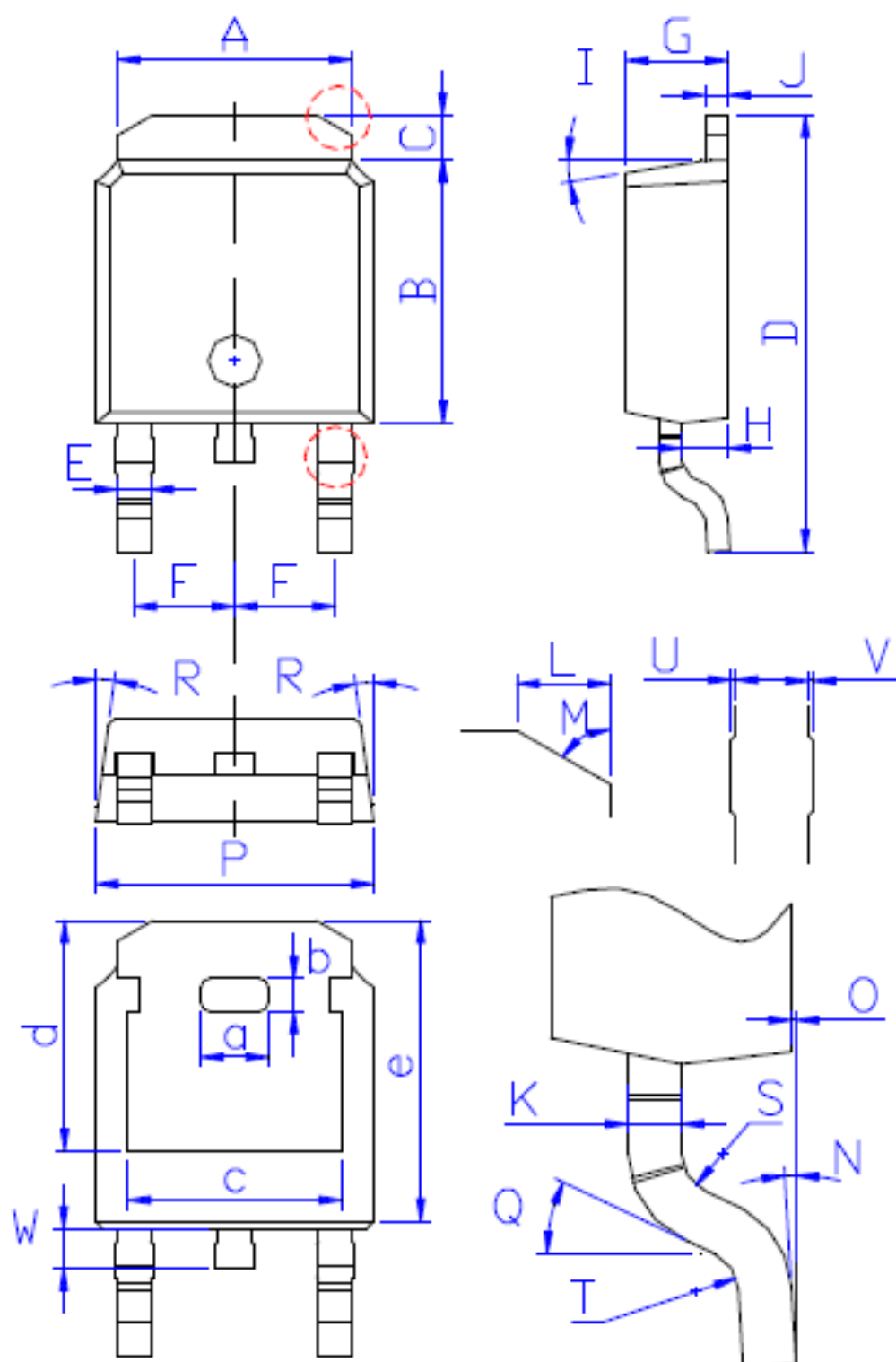
印记 Marking:



外形尺寸:

Package Dimension:

TO-252



DIM	MILLIMETERS
A	5.34±0.30
B	6.00±0.30
C	1.05±0.30
D	9.95±0.30
E	0.76±0.15
F	2.28±0.15
G	2.30±0.30
H	1.06±0.30
I	(4-10)°
J	0.51±0.15
K	0.52±0.15
L	0.80±0.30
M	60°
N	(0-10)°
O	0.05±0.05
P	6.60±0.30
Q	25°
R	(4-8.5)°
S	R0.40
T	R0.40
U	0.05±0.05
V	0.05±0.05
W	0.90±0.30
a	1.80±0.30
b	0.75±0.30
c	4.85±0.30
d	5.30±0.30
e	6.90±0.30

(Units: mm)