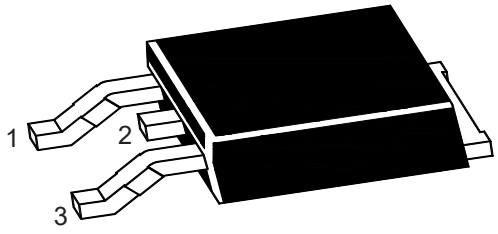
PJ78M12TE

3-Terminal Voltage Regulator

TO-252

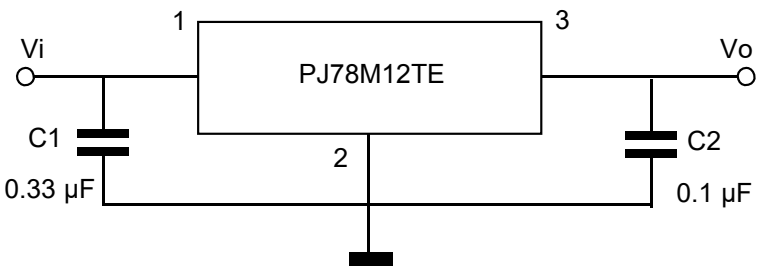


1. IN 2. GND 3. OUT

Maximum Ratings

Ratings at T_A = 25˚C ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Units
Input Voltage	V_I	35	V
Output Current	I_O	0.5	A
Power Dissipation	P_D	0.8	W
Junction Temperature	T_J	150	˚C
Storage Temperature Range	T_{STG}	-55～150	˚C



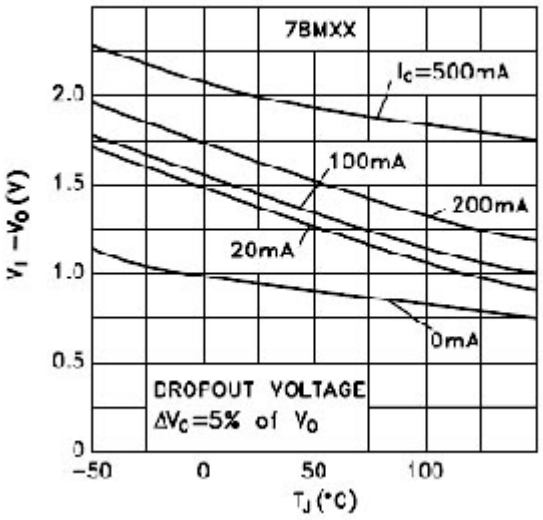
Electrical Characteristics

Ratings at T_J = 25°C, V_I=10V, Io=40mA, Ci=0.33μF,Co=0.1μF,unless otherwise specified.

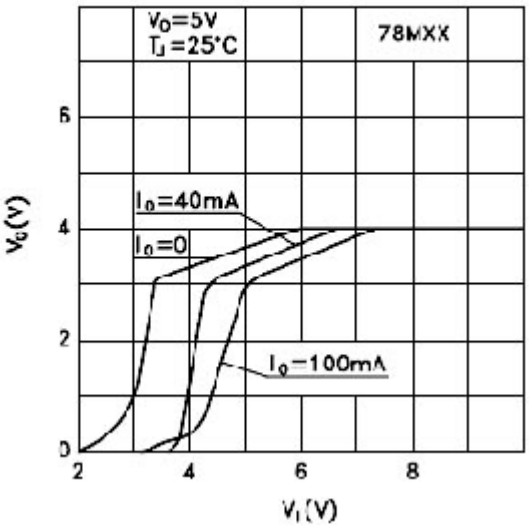
Parameter	Symbols	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	T_J=25°C	11.5	12	12.5	V
		5mA ≤ I_O ≤ 350mA V_I=14.5V to 27V	11.4	12	12.6	
Line Regulation	$\triangle V_O$	V_O = 14.5 V to 30 V			100	mV
		V_I = 16 V to 30 V			50	mV
Load Regulation	$\triangle V_O$	I_O = 5 mA to 500 mA			240	mV
		I_O = 5 mA to 200 mA			120	mV
Ripple Rejection	RR	V_I= 15~25 V, f=120Hz	55	80		dB
Output Noise Voltage	V_N	f=10Hz~100Hz, T_J=25°C		75		μV
Dropout Voltage	V_D	Io=1A		2		V
Quiescent Current	I_Q	T_J = 25°C			6	mA
Quiescent Current Change	$\triangle I_Q$	I_O = 5 mA to 350 mA, T_J = 25℃			0.5	mA
		V_I = 14.5 V to 30 V, T_J = 25℃			0.8	

Typical Characteristic Curves

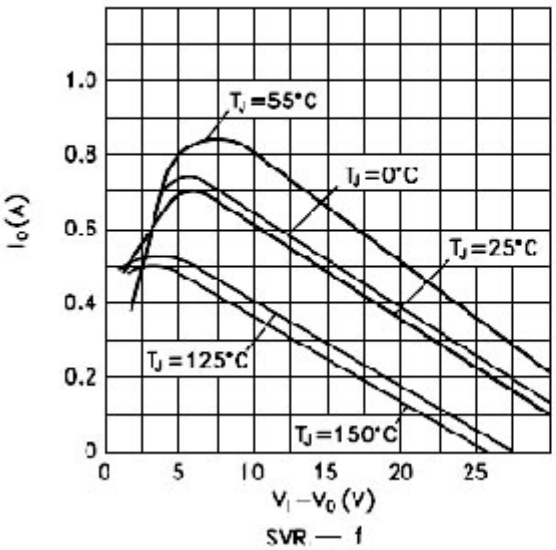
$V_I - V_O$ — T_J



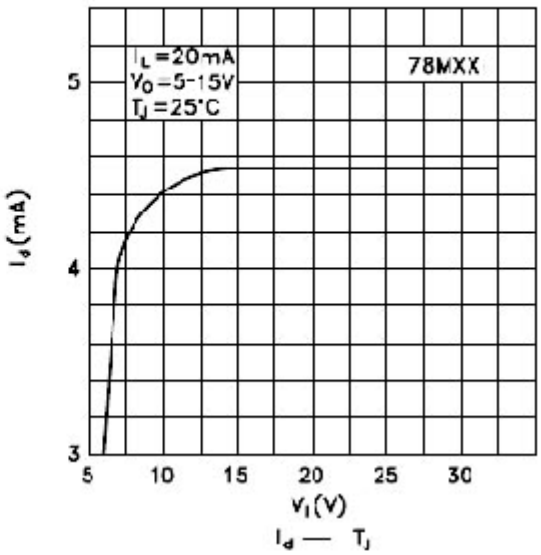
V_O — V_I



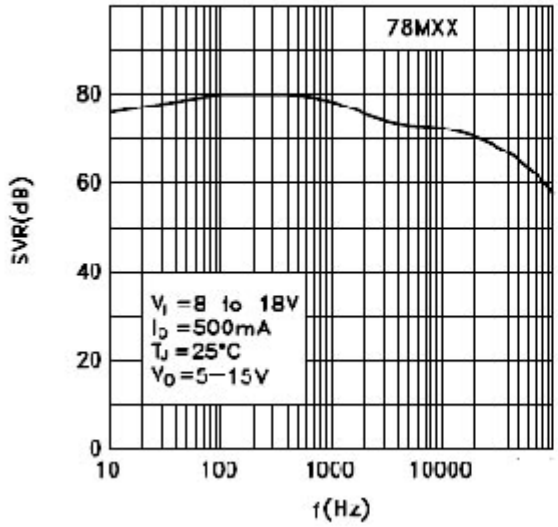
I_O — $V_I - V_O$



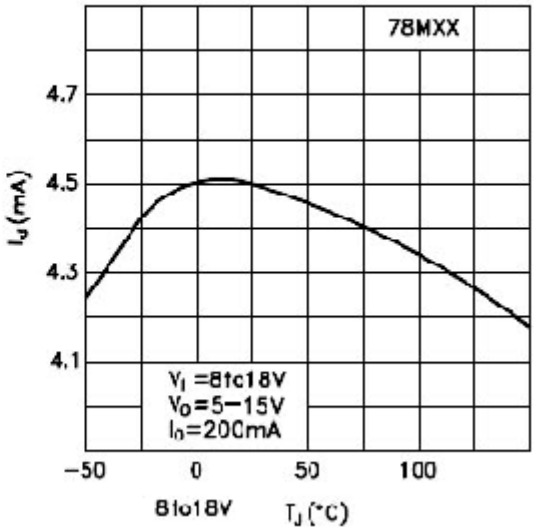
I_d — V_I



SVR — f

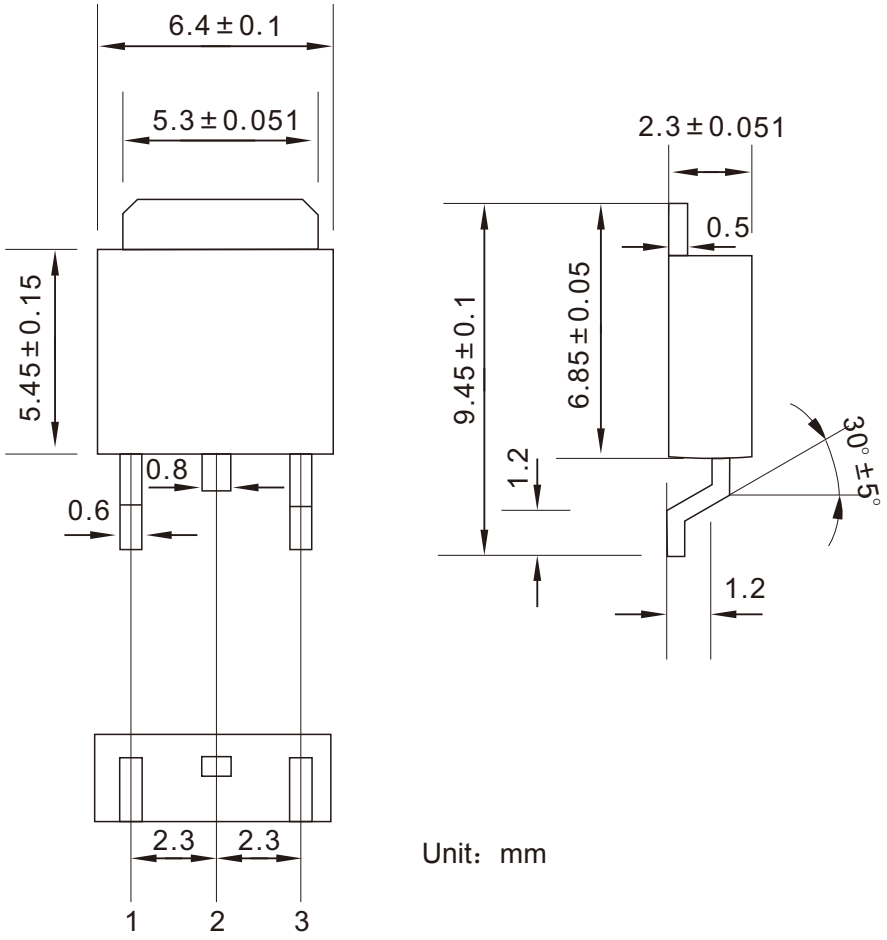


I_d — T_J



Package Outline

TO-252
Dimensions in mm



Unit：mm