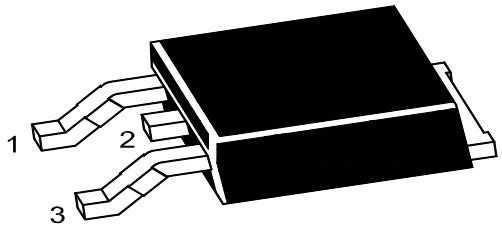
3-Terminal Voltage Regulator

Features

- Input Voltage up to 35V
- Output Voltage:5V
  Output Current：0.5A（Max）
- Overload Protection and Short-Circuit Limiting.

TO-252



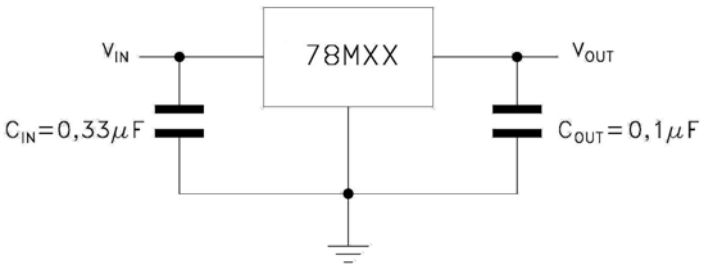
1、IN　2、GND　3、OUT

Absolute Maximum Ratings

Ratings at T_A = 25℃ unless otherwise specified.

Parameter	Symbol	Value	Unit
Input Voltage	V_I	35	V
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	100	℃/W
Thermal Resistance Junction-Case	$R_{\theta JC}$	8.0	℃/W
Operating Temperature Range	T_{OPR}	-40～125	℃
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-55～150	℃

Application Circuit



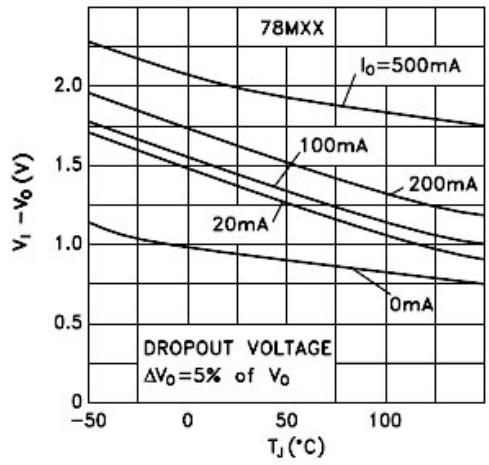
Electrical Characteristics

Ratings at T_A = 25℃ unless otherwise specified.

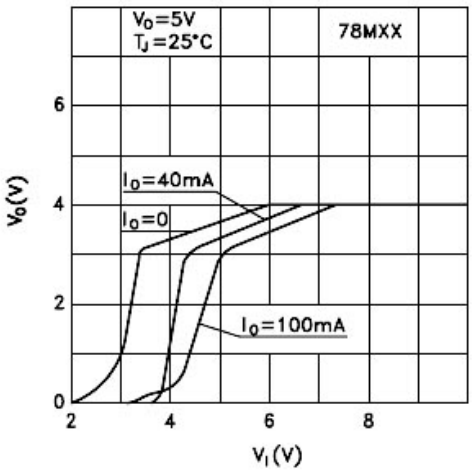
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	T_J=25℃	4.9	5	5.1	V
		V_i=7V-20V Io=5mA~350mA	4.8	5	5.2	V
Load Regulation	△Vo	Io=5mA-500mA T_J=25℃	–	–	100	mV
		Io=5mA~200mA T_J=25℃	–	–	50	mV
Line Regulation	△Vo	V_i=7V~25V T_J=25℃	–	–	100	mV
		V_i=8V~25V T_J=25℃	–	–	50	mV
Output Noise Voltage	eN	B=10Hz~100KHz T_J=25℃	–	40	–	μV
Ripple Rejection	RR	V_i=8V~18V f=120Hz	62	–	–	dB
Short Circuit Current	Isc	V_i=35V T_J=25℃	–	300	–	mA
Quiescent Current	I_Q	T_J=25℃	–	–	6	mA
Quiescent Current Change	△I_Q	V_i=8V~25V	–	–	0.8	mA
		Io=5mA~350mA	–	–	0.5	mA
Output Voltage Drift	△Vo/△T	Io=5mA	–	-0.5	–	mV/℃
Dropout Voltage	V_D	T_J=25℃	–	2	–	V
Short Circuit Peak Current	Iscp	T_J=25℃	–	700	–	mA

Electrical Characteristics Curves

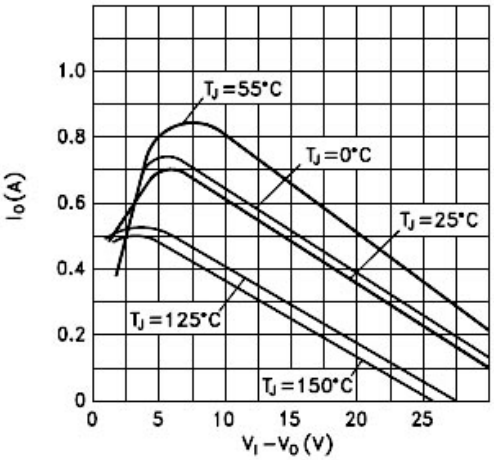
$V_I - V_O$ — T_J



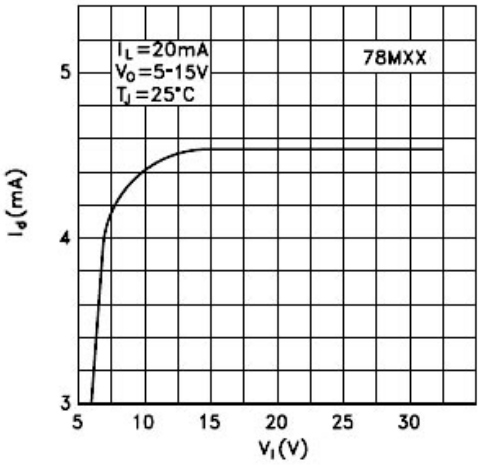
V_O — V_I



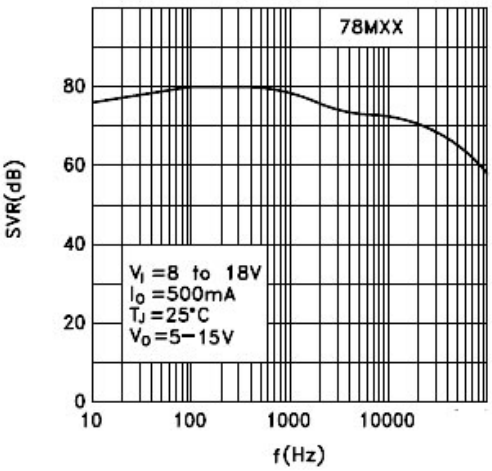
I_O — $V_I - V_O$



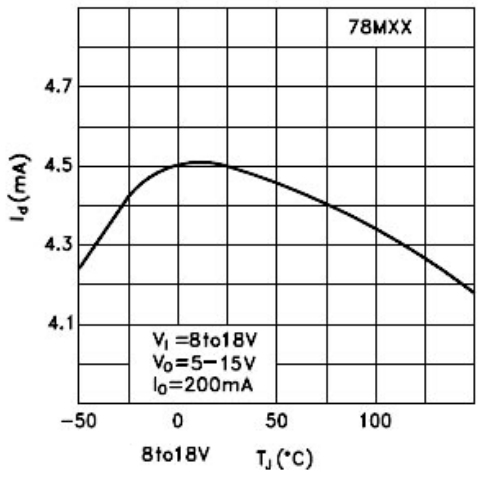
I_d — V_I



SVR — f



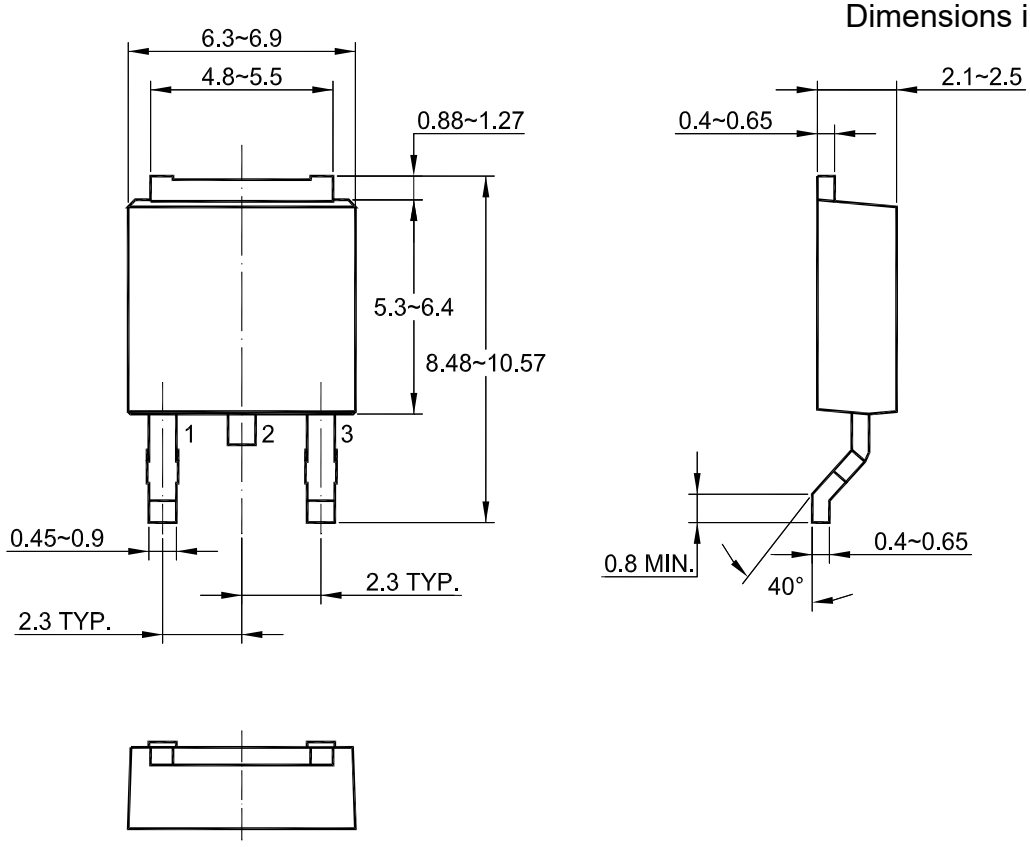
I_d — T_J



Package Outline

TO-252

Dimensions in Millimeters



Recommended Soldering Footprint