

/ Descriptions

TO-220F Voltage Regulator in a TO-220F Plastic Package.

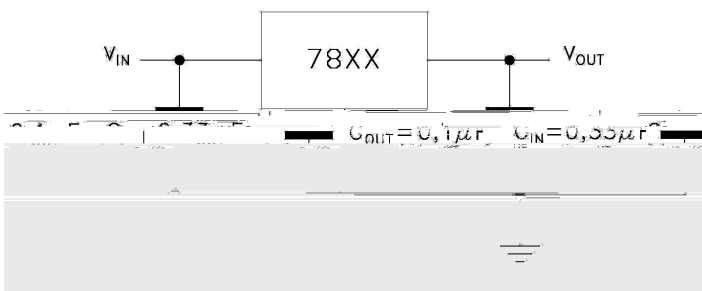
/ Features

1.5A,
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

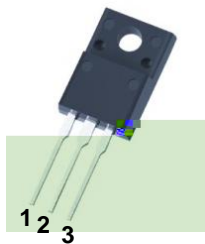
/ Applications

Voltage Regulator.

/ Equivalent Circuit or Application Circuit



/ Pinning



PIN1 GND PIN 3 OUT

/ Marking

See Marking Instructions


/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Input voltage	V_I	35	V
Thermal Resistance Junction-ambient	R_{JA}	50	/W
Thermal Resistance Junction-case	R_{JC}	5.0	/W
Operating Junction Temperature Range	T_{OPR}	0 125	
Storage temperature range	T_{stg}	-65 150	

/ Electrical Characteristics(Ta=25 $V_i=11V, I_o=500mA$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25$	5.75	6.0	6.25	V
		$V_i=9V-21V$ P_o 15W, $I_o=5mA-1A,$	5.7	6.0	6.3	V
Load Regulation	V_o	$T_j=25$ $I_o=5mA-1.5A$			120	mV
		$T_j=25$ $I_o=250mA-750mA$			60	mV
Line regulation	V_o	$T_j=25$ $V_i=8V-25V$			120	mV
		$T_j=25$ $V_i=9V-13V$			60	mV
Quiescent Current	I_q	$T_j=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=9V-25V$			0.8	mA
		$I_o=5mA-1A$			0.5	mA
Output Voltage Drift	V_o/ T	$I_o=5mA$		-0.8		mV/
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25$		45		$\mu V/V_o$
Supply Voltage Rejection	SVR	$V_i=9V-19V$ $f=120Hz$	59	75		dB
Dropout Voltage	V_d	$I_o=1A$ $T_j=25$		2.0		V
Output Resistance	R_o	$f=1KHz$		19		m
Short Circuit Current	I_{sc}	$V_i=35V$ $T_j=25$		0.55		A
Short Circuit Peak Current	I_{scp}	$T_j=25$		2.2		A

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Rev.G Dec.-2018

DATA SHEET

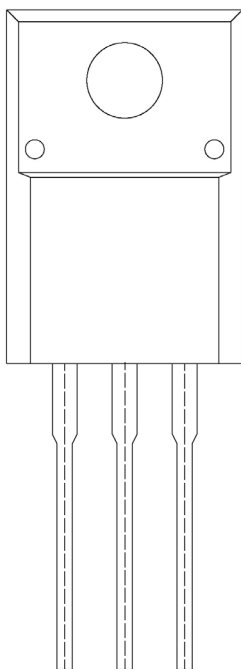
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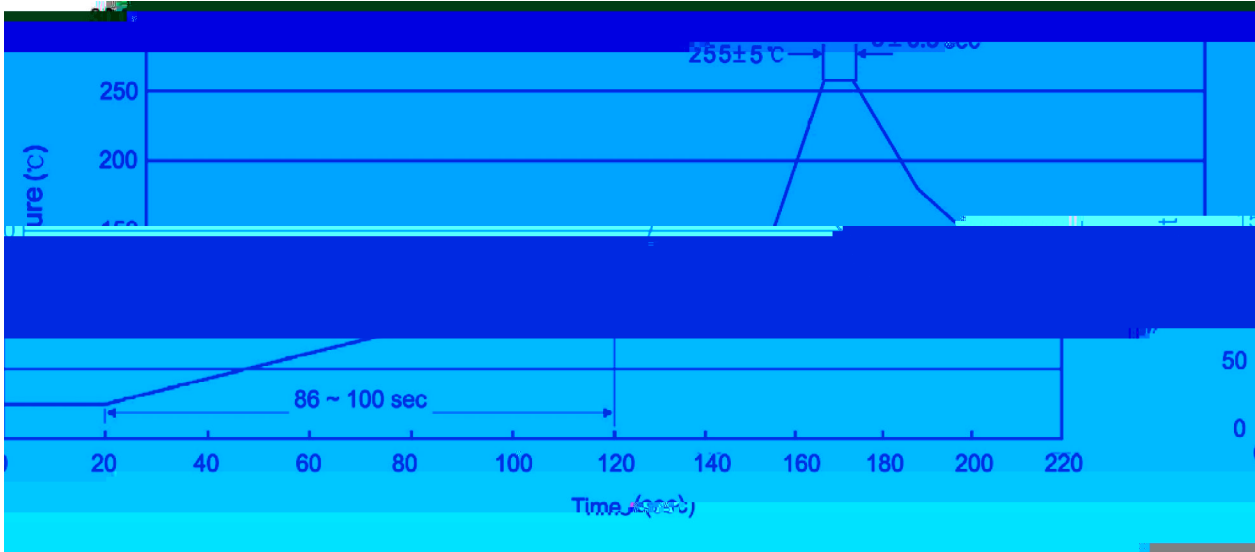
DATA SHEET <http://www.fsbl.com>

Note: Marking Instructions Company Code.

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() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|--------|-----|------------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255..5 | | 5..0.5sec; | | 2.Peak Temp.:255..5 , Duration:5..0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270..5 10..1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50

/ Notices