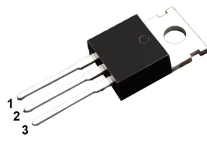
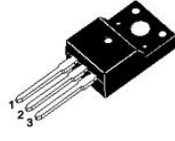


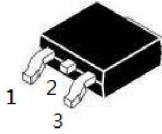
Three-terminal positive voltage regulator



TO-220C



TO-220F



TO-252

1.In 2.G nd 3.Out

FEATURES

- Output current up to 1.5A
- 5V;6V;8V;9V; 12V;15V;18V;24V output voltage available
- Thermal overload protection
- Short circuit protection
- Output transistor SOA protection

RoHS

ABSOLUTE MAXIMUM RATINGS

Operating temperature range applies unless otherwise

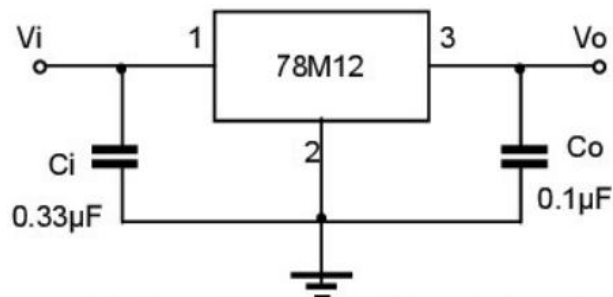
Parameter	Symbol	Value	Unit
Input Voltage	V	35	V
Operating Junction Temperature Range	TOPR	-40~+125	°C
Storage Temperature Range	Tstg	-65~+150	°C
Power Dissipation-1 (No Heatsink)	PD1	1.9	W
Power Dissipation-2(Infinite Heatsink)	PD2	30	W

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION

 ($V_i=19V$, $I_o=500mA$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, unless otherwise specified)

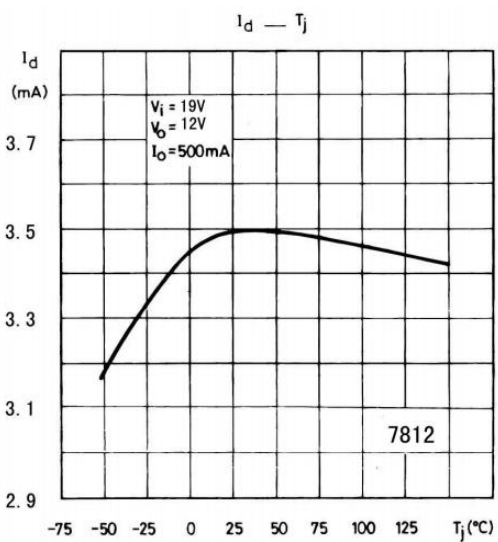
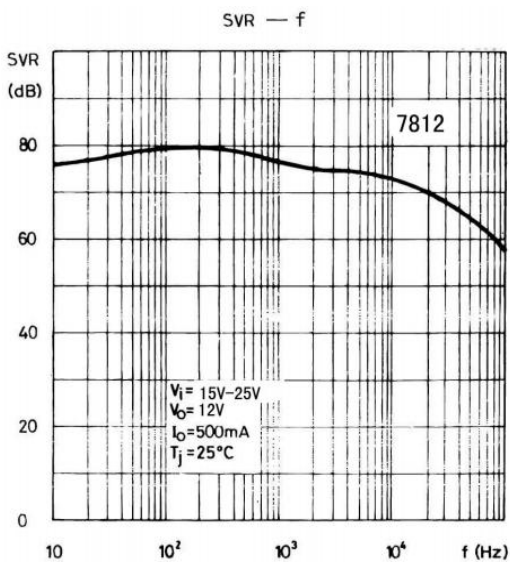
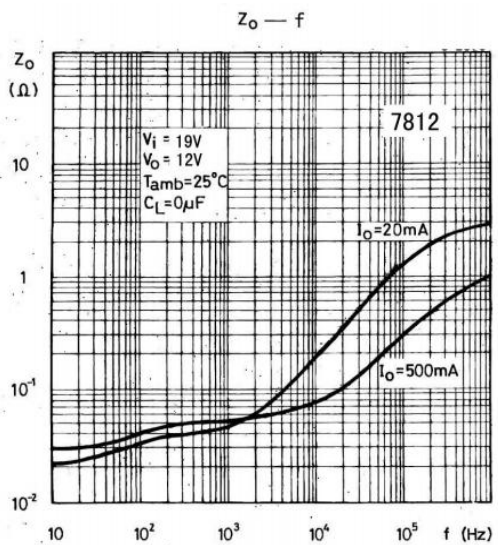
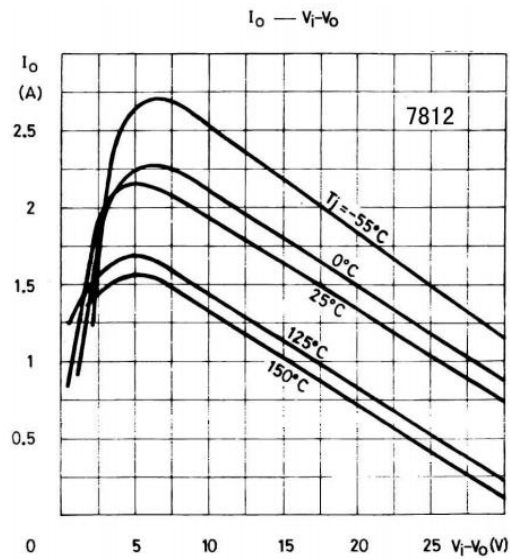
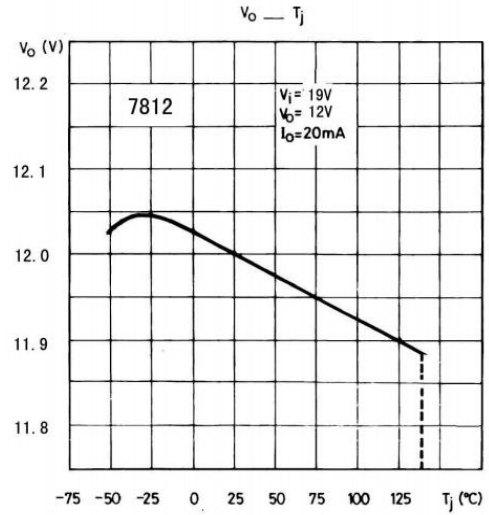
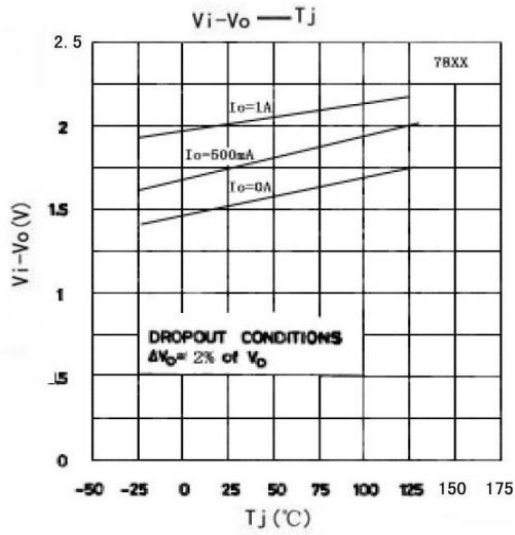
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Output Voltage	V_o	25°C	11.5	12	12.5	V
		14.5V≤ V_i ≤27V, $I_o=5mA-1A$ $P_{os} \leq 15W$ 0~125°C	11.4	12	12.6	V
Load Regulation	ΔV_o	$I_o=5mA-1.5A$ 25°C		12	240	mV
		$I_o=250mA-750mA$ 25°C		5	120	mV
Line Regulation	ΔV_o	14.5V≤ V_i ≤30V, $I_o=500mA$ 25°C		10	240	mV
		16V≤ V_i ≤22V, $I_o=500mA$ 25°C		3	120	mV
Quiescent Current	I_q	25°C		5.1	8	mA
Quiescent Current Change	ΔI_q	15V≤ V_i ≤30V, $I_o=500mA$ 0~125°C			0.8	mA
		5mA≤ I_o ≤1A 0~125°C			0.5	mA
Output Noise Voltage	V_N	10Hz≤ f ≤100KHz 25°C		76		uV/ V_o
Ripple Rejection	RR	15V≤ V_i ≤25V, f=120Hz, $I_o=500mA$ 0~125°C		64		dB
Dropout Voltage	VD	$I_o=1A$ 25°C		2		V
Short Circuit Current	ISC	$V_i=35V$ 25°C		230		mA
Peak Current	I_{pk}	25°C		2.2		A

TYPICAL APPLICATION

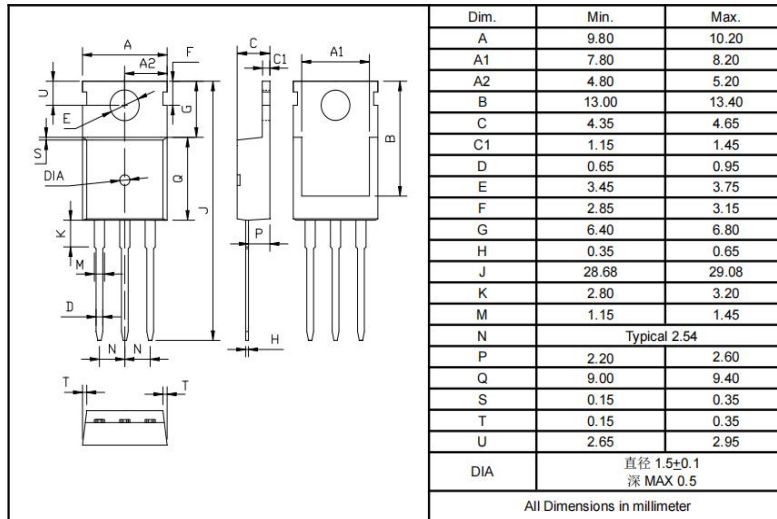
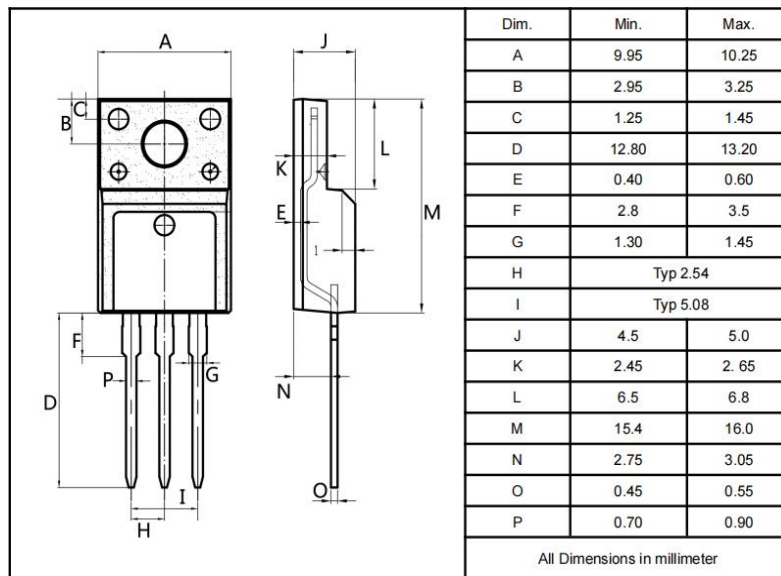
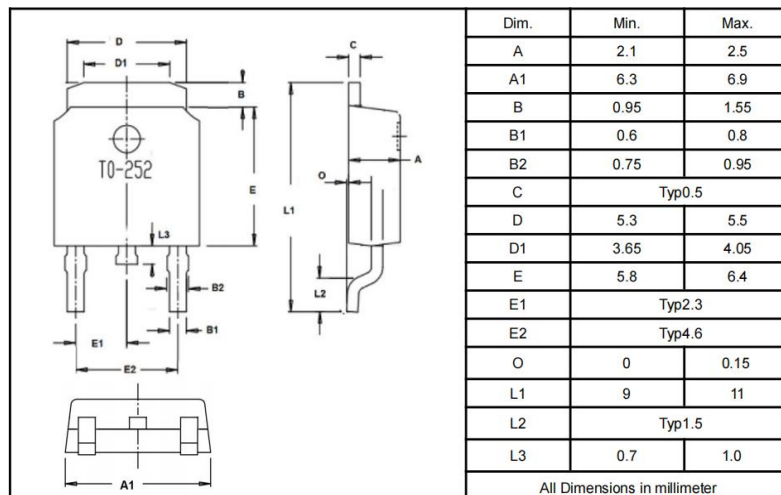


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to

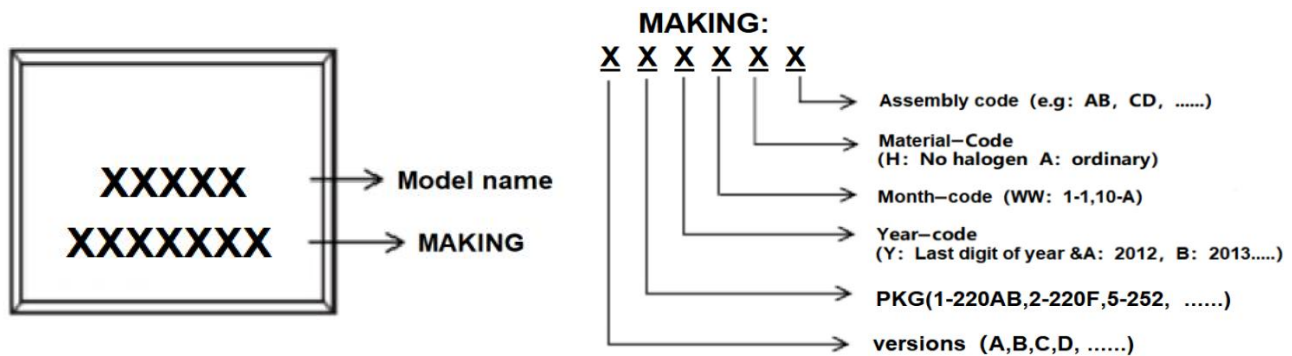
RATINGS AND CHARACTERISTIC CURVES



Package Outline Dimensions millimeters

TO-220C

TO-220F

TO-252


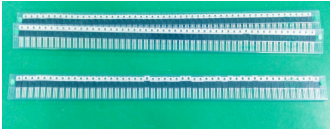
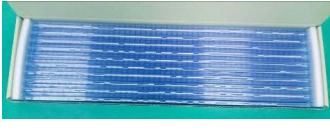
Marking on the body



Ordering information

Part Number	Package	Base Quantity	Delivery mode
7812	TO-220C	50 pcs / tube	1000pcs/box 5000pcs/carton
7812	TO-220F	50 pcs / tube	1000pcs/box 5000pcs/carton
7812	TO-252	2500 pcs / reel	5000pcs/box 25000pcs/carton

packing instruction

PKG	最小包装	内盒	外箱
TO-220C TO-220F			
	50pcs/管	1000pcs/盒	5000pcs/箱
TO-252			
	2500pcs/盘	5000pcs/盒	25000pcs/箱

Notice

All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.

LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document; power exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.