

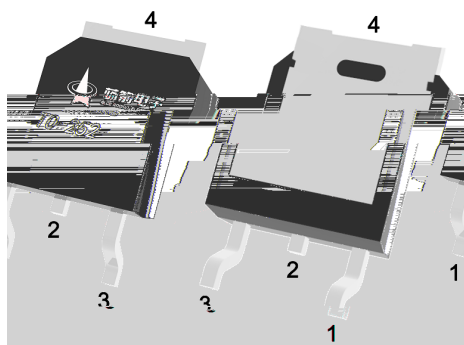
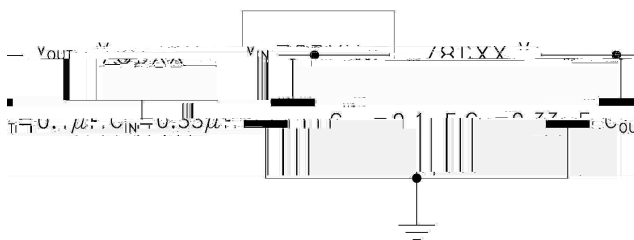
TO-252 Voltage Regulator in a TO-252 Plastic Package.

1.5A,

AEC-Q100

3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

Voltage Regulator, Meet the stringent requirements of automotive applications.

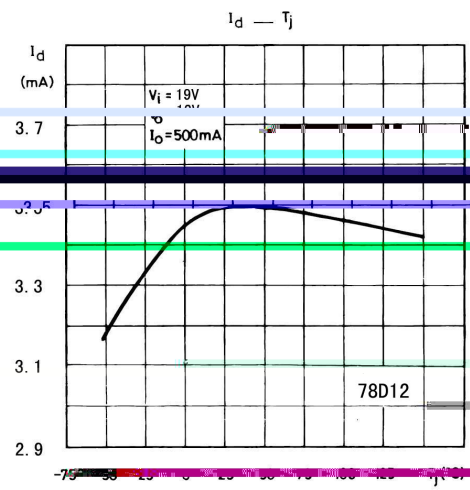
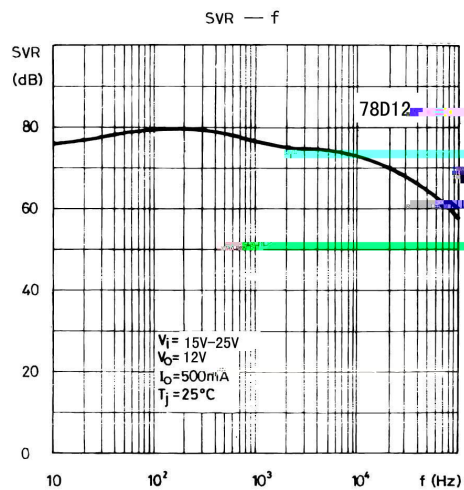
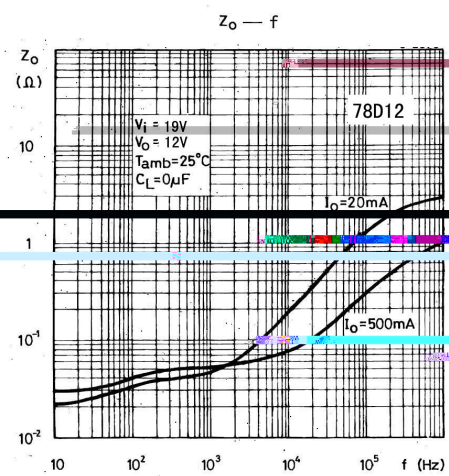
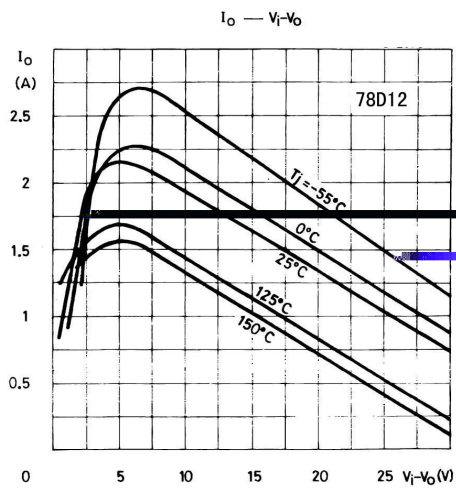
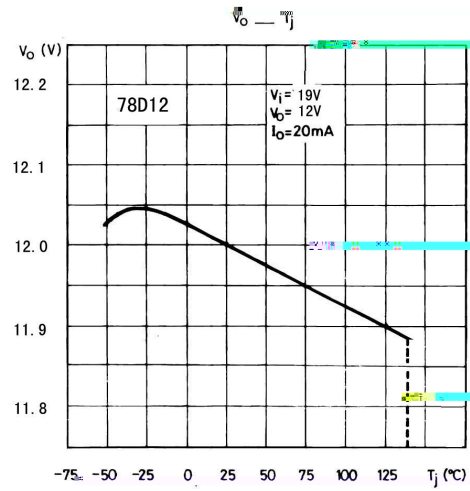
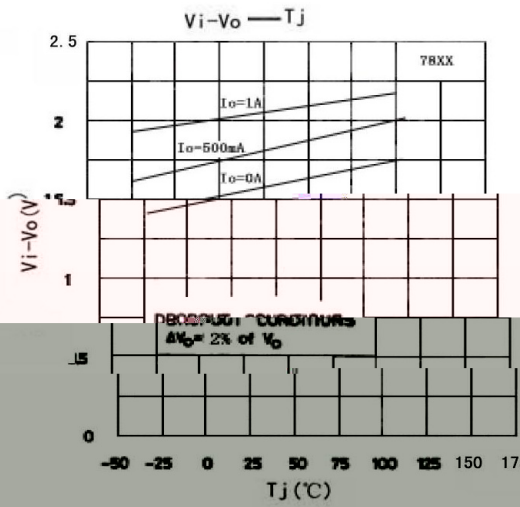


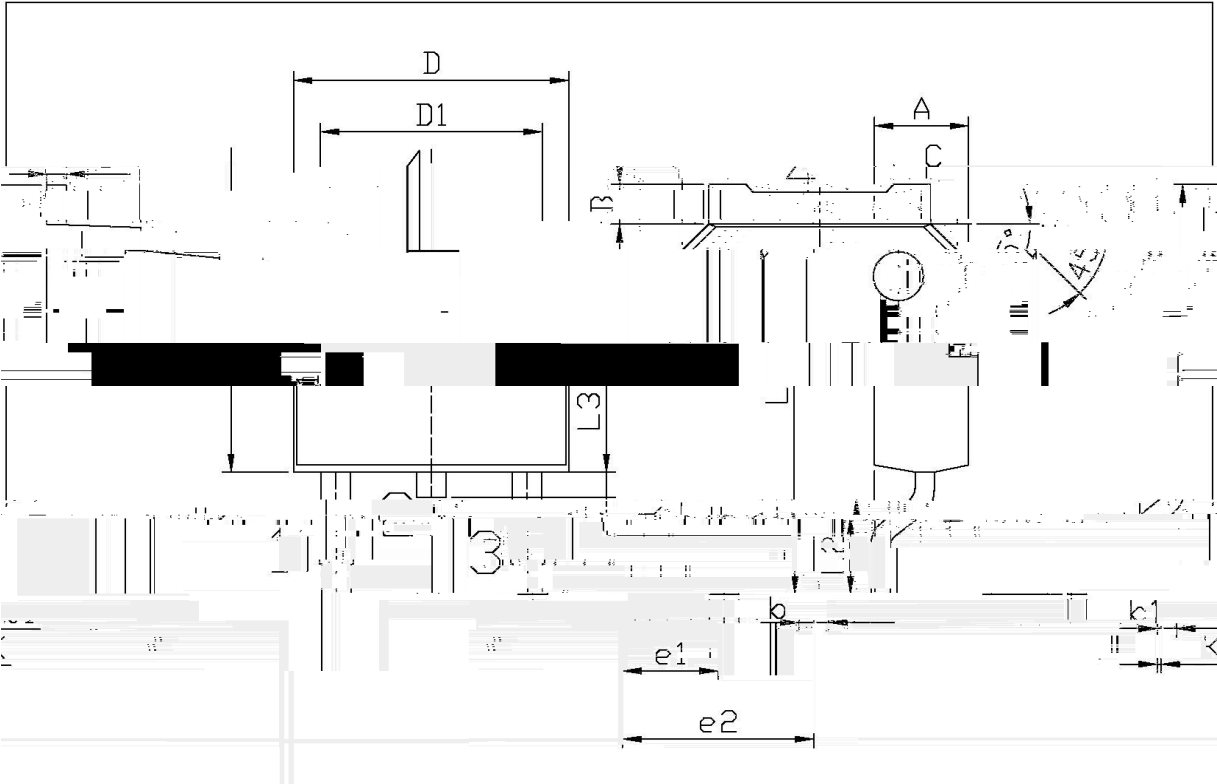
PIN1 IN PIN 2 4 GND PIN 3 OUT

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Input voltage	V_i	35	V
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	105	$^{\circ}\text{C}/\text{W}$
Thermal Resistance Junction-Case	$R_{\theta JC}$	10	$^{\circ}\text{C}/\text{W}$
Operating Temperature Range	T_{OPR}	-40~125	$^{\circ}\text{C}$
Storage temperature range	T_{stg}	-65~150	$^{\circ}\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25^{\circ}\text{C}$	11.5	12.0	12.5	V
		$V_i=14.5\text{V}-27\text{V}$ $I_o=5\text{mA}-1\text{A}$ $P_o \leq 15\text{W}$	11.4	12.0	12.6	V
Load Regulation	ΔV_o	$T_j=25^{\circ}\text{C}$ $I_o=5.0\text{mA}-1.5\text{A}$			240	mV
		$T_j=25^{\circ}\text{C}$ $I_o=250\text{mA}-750\text{mA}$			120	mV
Line regulation	ΔV_o	$T_j=25^{\circ}\text{C}$ $V_i=14.5\text{V}-30\text{V}$			240	mV
		$T_j=25^{\circ}\text{C}$ $V_i=16\text{V}-22\text{V}$			120	mV
Quiescent Current	I_q	$T_j=25^{\circ}\text{C}$			8.0	mA
Quiescent Current Change	ΔI_q	$V_i=14.5\text{V}-30\text{V}$			1.0	mA
		$I_o=5\text{mA}-1\text{A}$			0.5	mA
Output Voltage Drift	$\Delta V_o/\Delta T$	$I_o=5\text{mA}$		-1		mV/ $^{\circ}\text{C}$
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25^{\circ}\text{C}$		75		$\mu\text{V}/V_o$
Supply Voltage Rejection	SVR	$V_i=15\text{V}-25\text{V}$ $f=120\text{Hz}$	55			dB
Dropout Voltage	V_d	$I_o=1\text{A}$ $T_j=25^{\circ}\text{C}$		2.0		V
Output Resistance	R_o	$f=1\text{KHz}$		18		m Ω
Short Circuit Current	I_{sc}	$V_i=35\text{V}$ $T_j=25^{\circ}\text{C}$		0.35		A
Short Circuit Peak Current	I_{scp}	$T_j=25^{\circ}\text{C}$		2.2		A



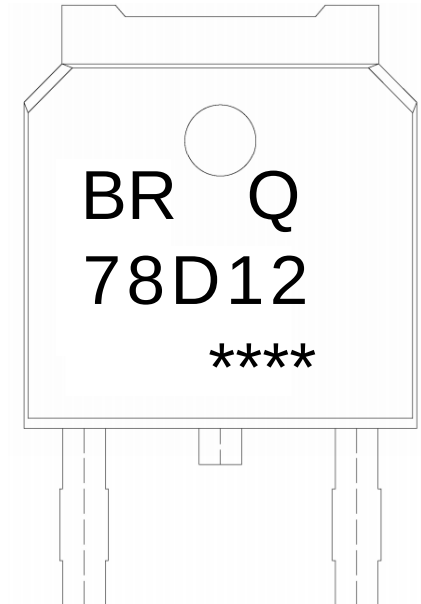


单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	6.25	2.20	B	0.95	1.25
B	2.34	0.95	C	1.25	2.24
C	4.73	0.70	D	0.90	4.49
D	9.85	0.45	E	0.45	0.55
E	10.35	0.55	F	1.70	0.00
F	0.45	0.90	G	6.45	6.75
G	0.60	0.10	H	5.10	5.50
H	0.00	0.10	I		

-252

T□-



BR

Q

78D12

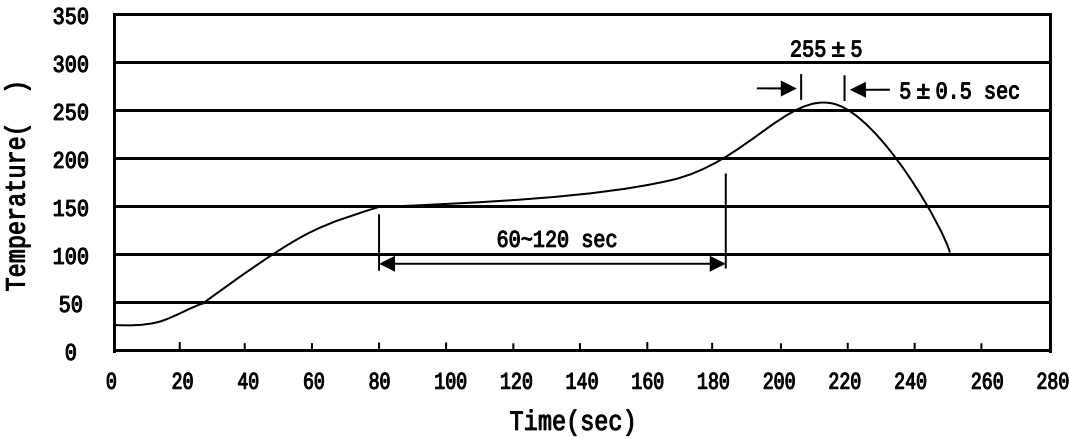
Note:

BR: Company Code

Q: Automobile halogen-free product Code

78D12: Product Type

****: Lot No. Code, code change with Lot No



Note:

- 1

150 200

60 120sec;

1.Preheating:150~200 , Time:60~120sec.
- 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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ 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	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180