/ Descriptions

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

/ Features

4!8D/ 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.

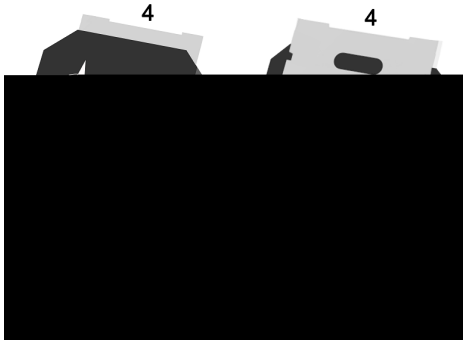
/ Applications

Voltage Regulator, Meet the stringent requirements of automotive applications.

/ / Equivalent Circuit or Application Circuit



/ Pinning



PIN1 χ IN PIN 2 4 χ GND PIN 3 χ OUT

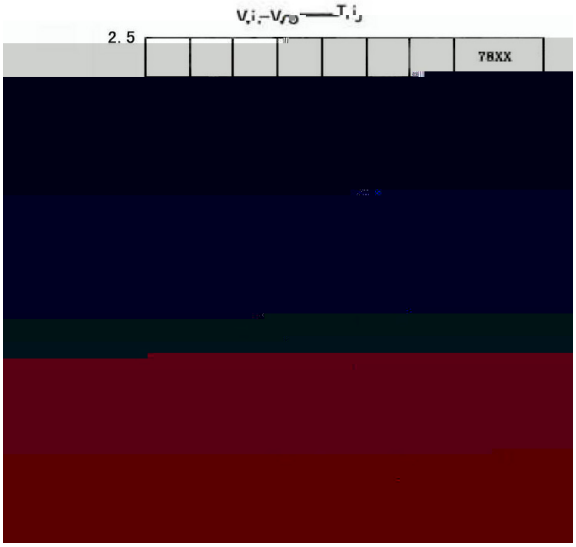
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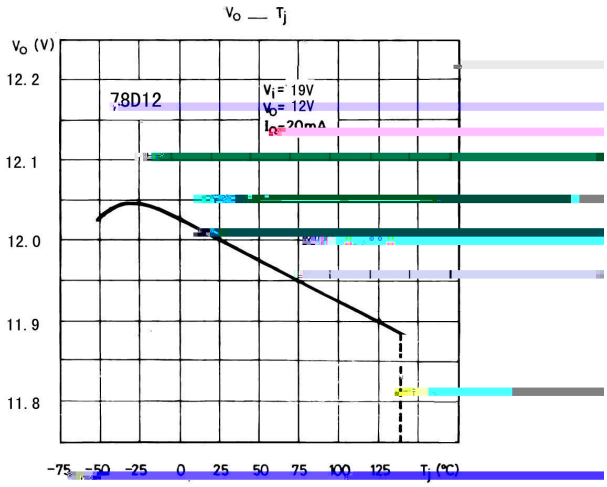
See Marking Instructions.

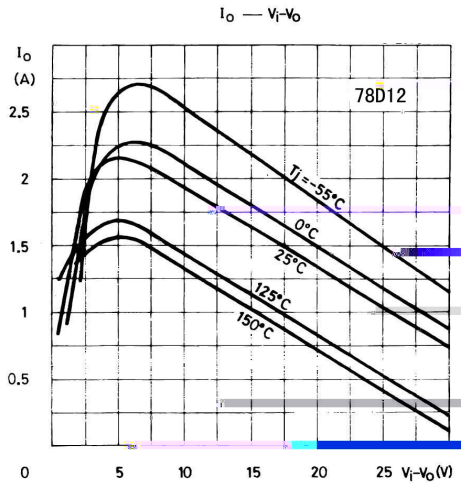
Parameter	Symbol	Rating	Unit
Input voltage	V_I	35	V
Thernal Resistance Junction-Ambient	R_{JA}	105	Ņ/W
Thernal Resistance Junction-Case	R_{JC}	10	Ņ/W
Operating Temperature Range	T_{OPR}	-40 125	Ņ
Storage temperature range	T_{stg}	-65 150	Ņ

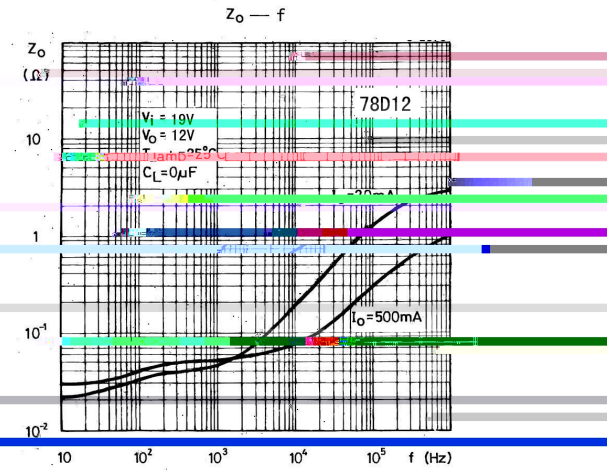
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	T_j=25 Ņ	11.5	12.0	12.5	V
		V_i=14.5V-27V Io=5mA-1A Po 15W	11.4	12.0	12.6	V
Load Regulation	$_{Ri}$Vo	T_j=25 Ņ Io=5.0mA-1.5A			240	mV
		T_j=25 Ņ Io=250mA-750mA			120	mV
Line regulation	$_{Ri}$Vo	T_j=25 Ņ Vi=14.5V-30V			240	mV
		T_j=25 Ņ Vi=16V-22V			120	mV
Quiescent Current	Iq	TI				

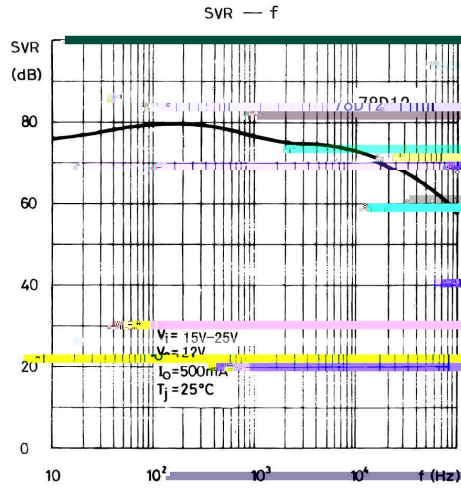
/ Electrical Characteristic Curve

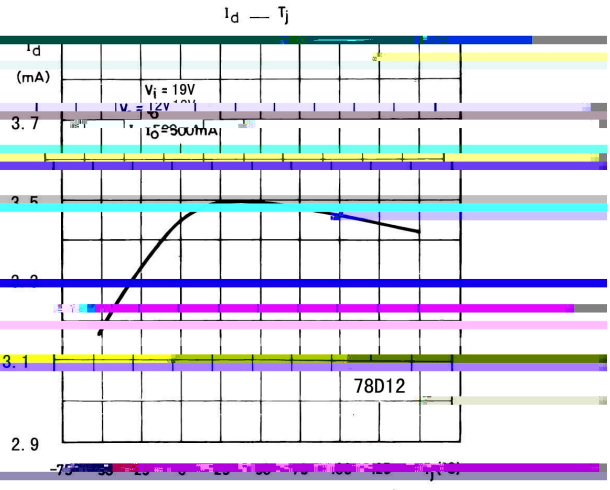




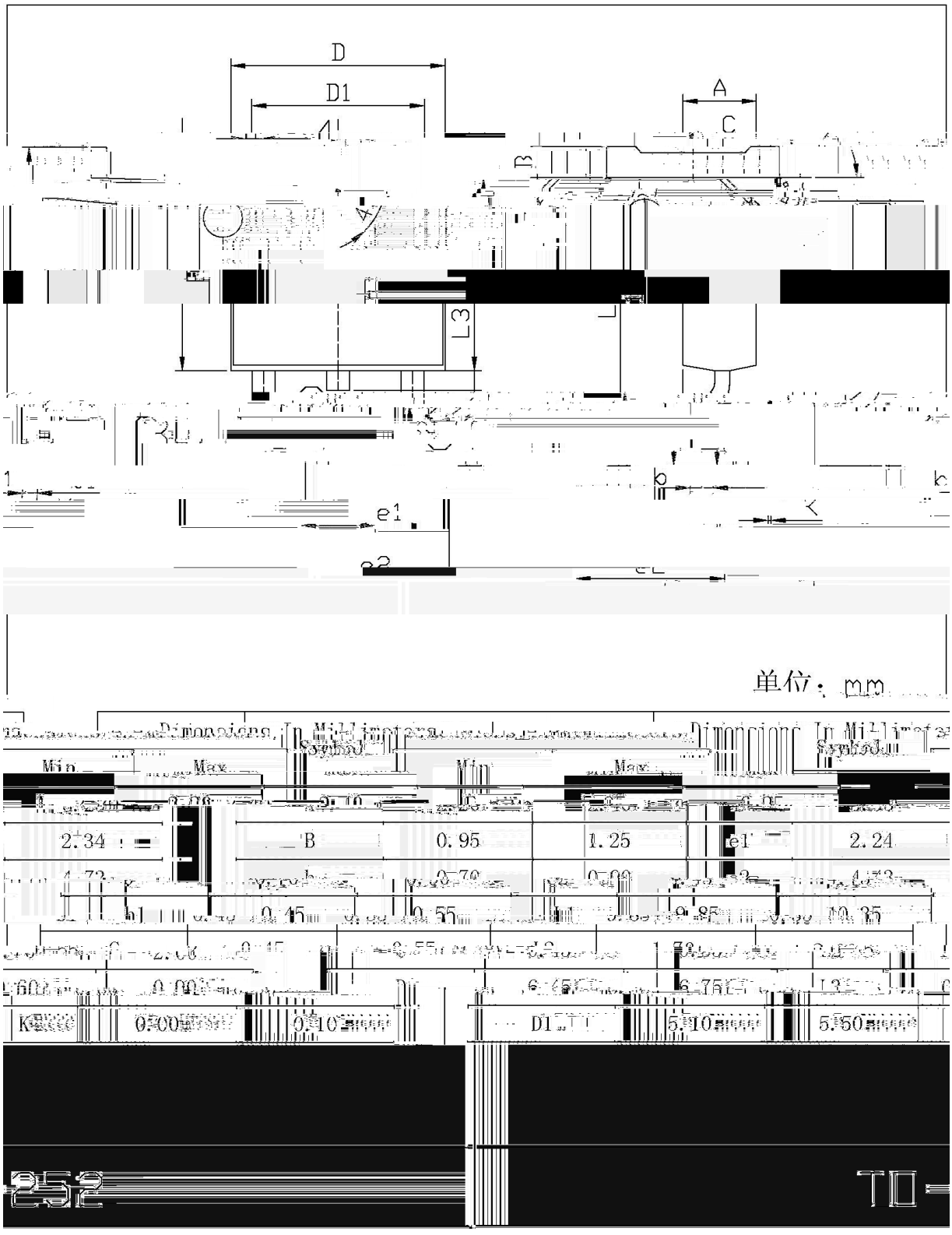




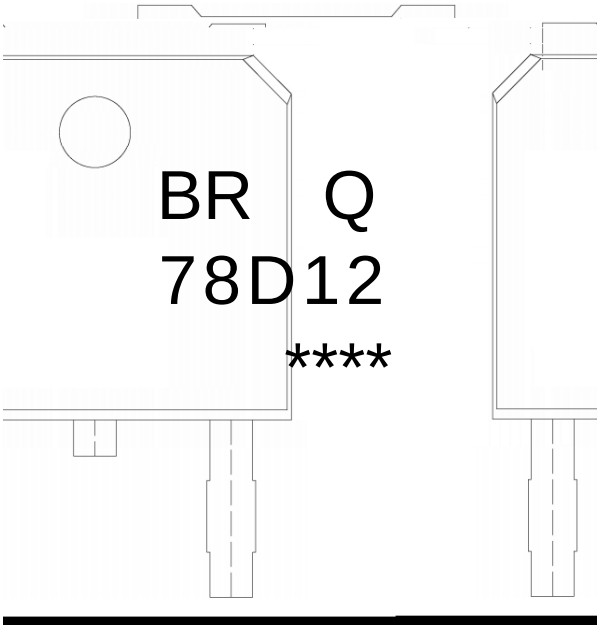




/ Package Dimensions



/ Marking Instructions



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EU χ и

Q χ

: ; G45 χ N

**** χ N N

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
78D12:	Product Type
****:	Lot No. Code, code change with Lot No

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

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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. peak2~10 0 /sec.