

/ Descriptions

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

/ Features

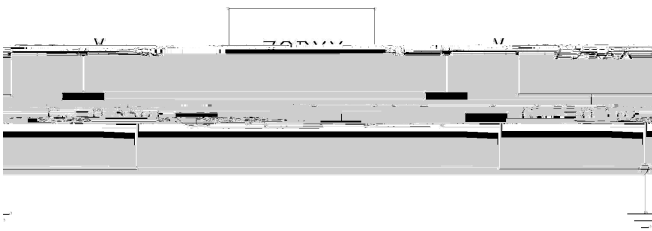
1.0A, AEC-Q100

3-Terminal regulators ,output current up to 1.0A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

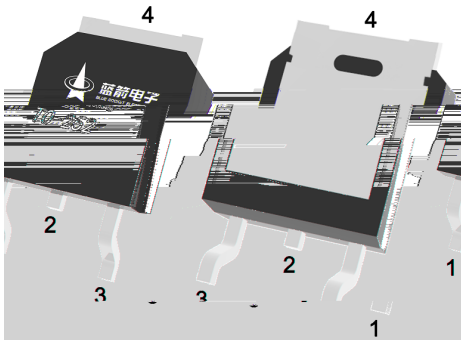
/ Applications

Voltage Regulator, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit or Application Circuit



/ Pinning



PIN1 GND PIN 2 4 IN PIN 3 OUT

/ Marking

See Marking Instructions.

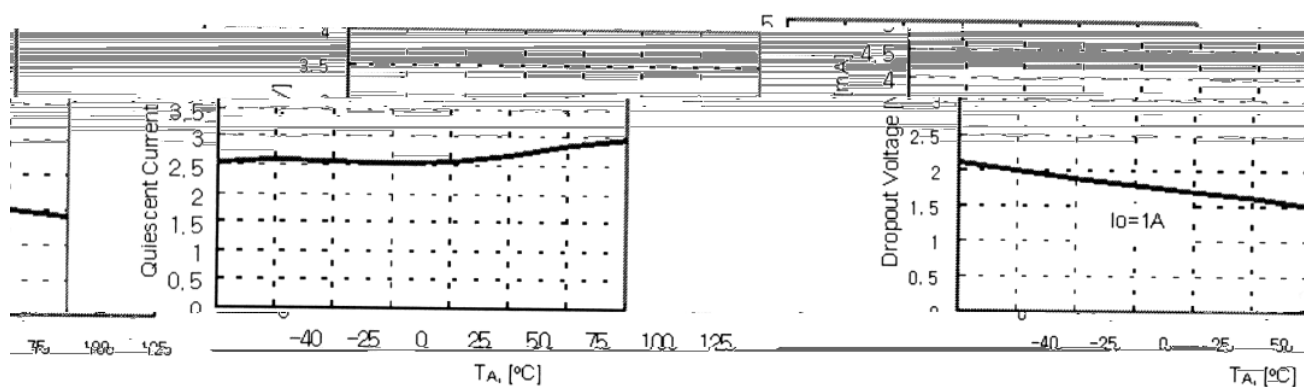
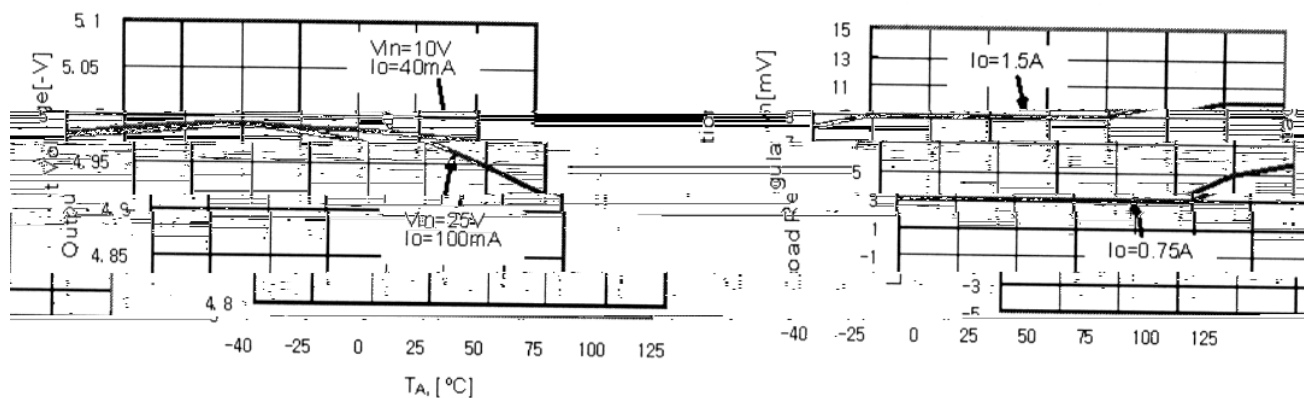
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Input Voltage Difference	V_I	-35	V
Junction-to-Ambient	R_{JA}	65	/W
Junction-to-Case	R_{JC}	5	/W
Operating Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 +150	

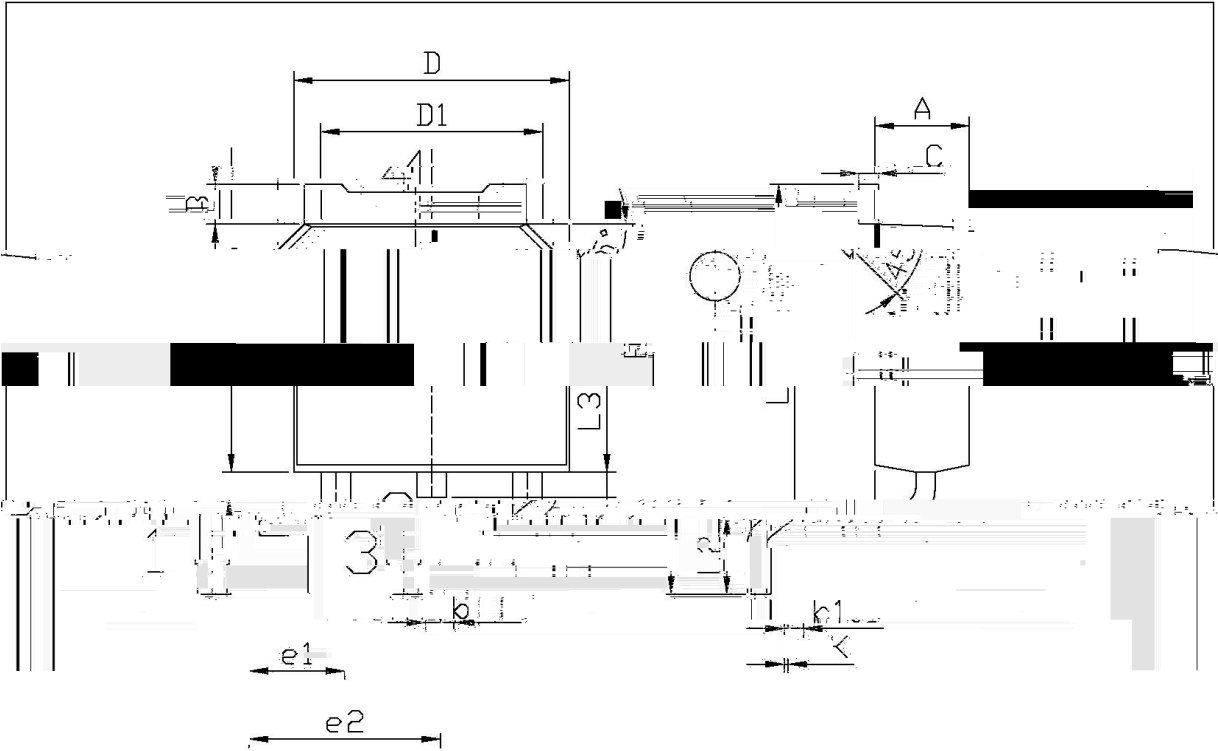
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Line regulation	V_O	$T_j=25$	-4.8	-5.0	-5.2	V
		$V_i=8$ to 20V, $I_o=-5mA$ to -1A, P_o 15W	-4.75	-5.0	-5.25	
Load Regulation	V_O	$T_j=25$ $I_o=5mA$ to 1.5A			100	mV
		$T_j=25$ $I_o=250mA$ to 750mA			50	
Load Regulation	V_O	$T_j=25$ $V_i=-7V$ to -25V			100	mV
		$T_j=25$ $V_i=-8V$ to -12V			50	
Bias current	I_d	$T_j=25$			8.0	mA
Bias current change	I_d	$V_i=-8V$ to -25V			0.8	mA
		$I_o=5mA$ to 1A			0.5	mA
Ratio of Change in VREF to Cathode Voltage	V_O/ T	$I_o=5mA$		-0.4		mV/
RMS Noise vs. %of VOUT	eN	B=10Hz to 100KHz $T_j=25$		100		V
Ripple Rejection	SVR	$V_i=10V$ $f=120Hz$	54	60		dB
Dropout voltage	V_d	$I_o=1A$ $T_j=25$ $V_O=100mV$		1.4		V
Short Circuit Current Limit	Isc			2.1		A

/ Electrical Characteristic Curve



/ Package Dimensions



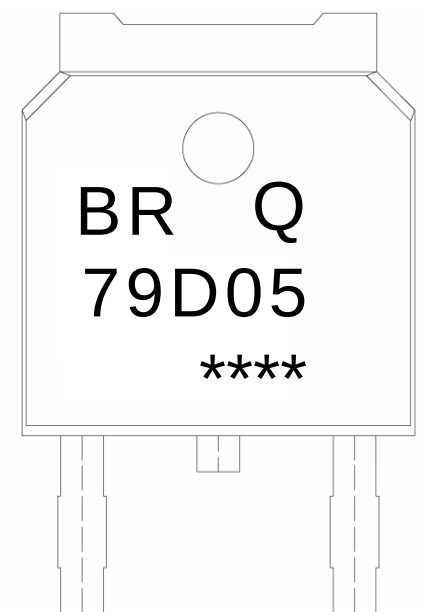
单位: mm

Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Min	Max	Symbol	Min	Max
F	5.95	6.25	A	2.20	2.40
e1	2.24	2.34	B	0.95	1.25
e2	4.43	4.73	C	0.70	0.90
L3	9.85	10.35	L2	0.45	0.55
K	15.00	15.50	D1	1.70	2.00
	0.60	0.90	p	6.45	6.75
	0.00	0.10		5.10	5.50

52

T□=2

/ Marking Instructions



Q

Note:

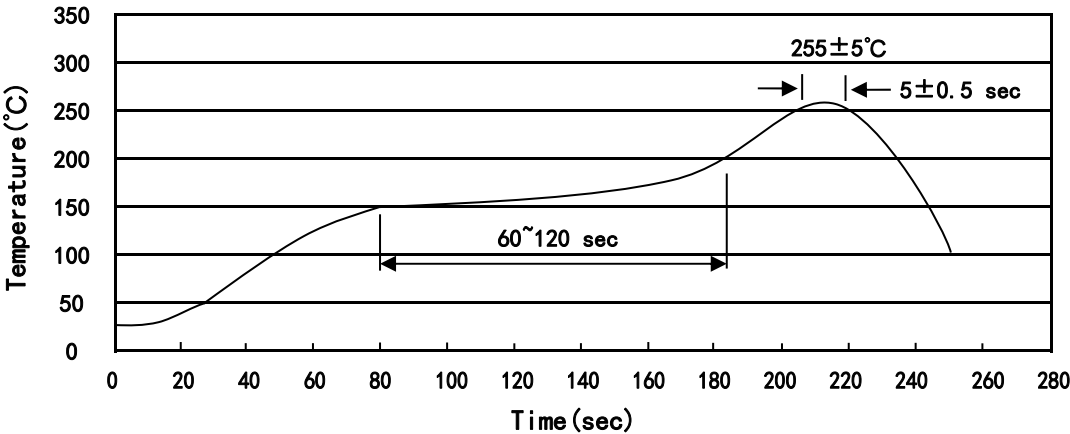
BR: Company Code

Q: Automobile halogen-free product Code

79D05: Product Type

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

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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. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices