/ Descriptions

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

/ Features

1.0A, AEC-Q100

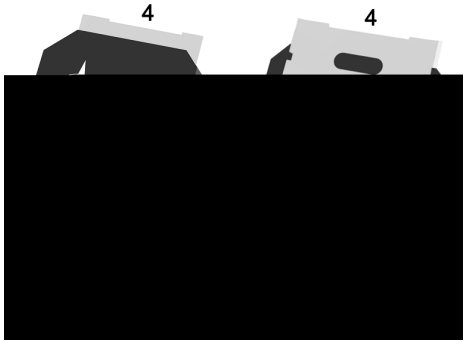
3-Terminal regulators ,output current up to 1.0A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

/ 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.

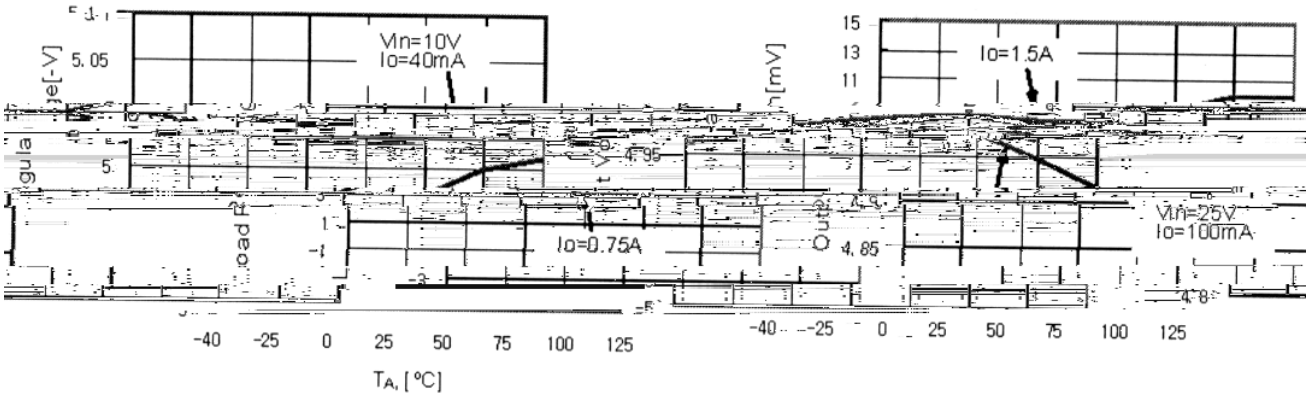
/ Absolute Maximum Ratings(Ta=25)

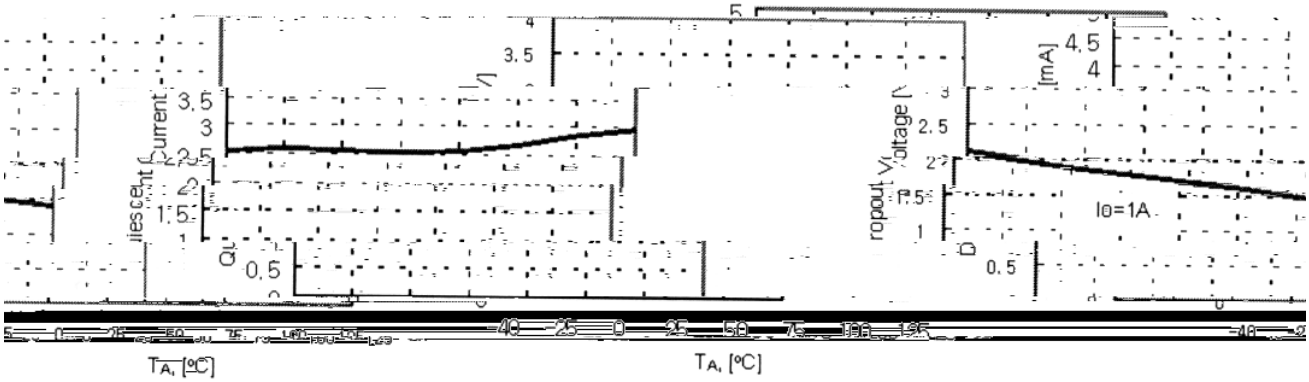
Parameter	Symbol	Rating	Unit
Input Voltage Difference	V_I	-35	V
Junction-to-Ambient	$R_{\theta JA}$	65	/W
Junction-to-Case	$R_{\theta JC}$	5	/W
Operating Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 +150	

/ Electrical Characteristics(Ta=25)

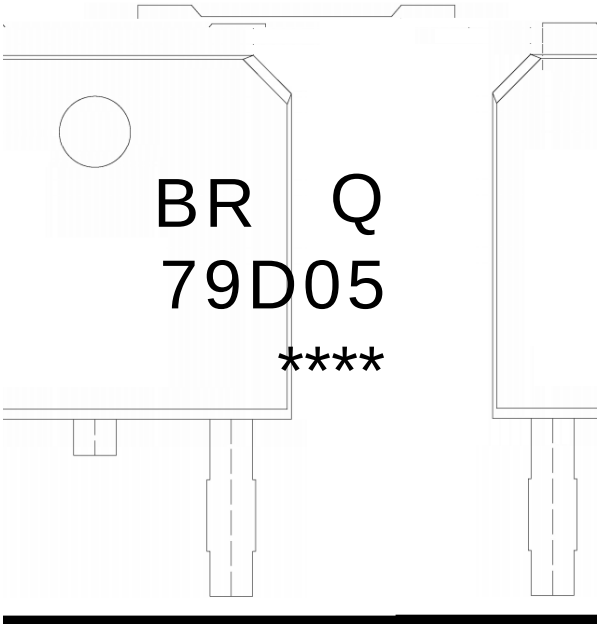
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Line regulation	V_O	T_j=25	-4.8	-5.0	-5.2	V
		Vi=8 to 20V, Io=-5mA to -1A,Po≤15W	-4.75	-5.0	-5.25	
Load Regulation	Vo	T_j=25 Io=5mA to 1.5A			100	mV
		T_j=25 Io=250mA to 750mA			50	
Load Regulation	Vo	T_j=25 V_i=-7V to -25V			100	mV
		T_j=25 V_i=-8V to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

/ Electrical Characteristic Curve





/ Marking Instructions



BR

Q

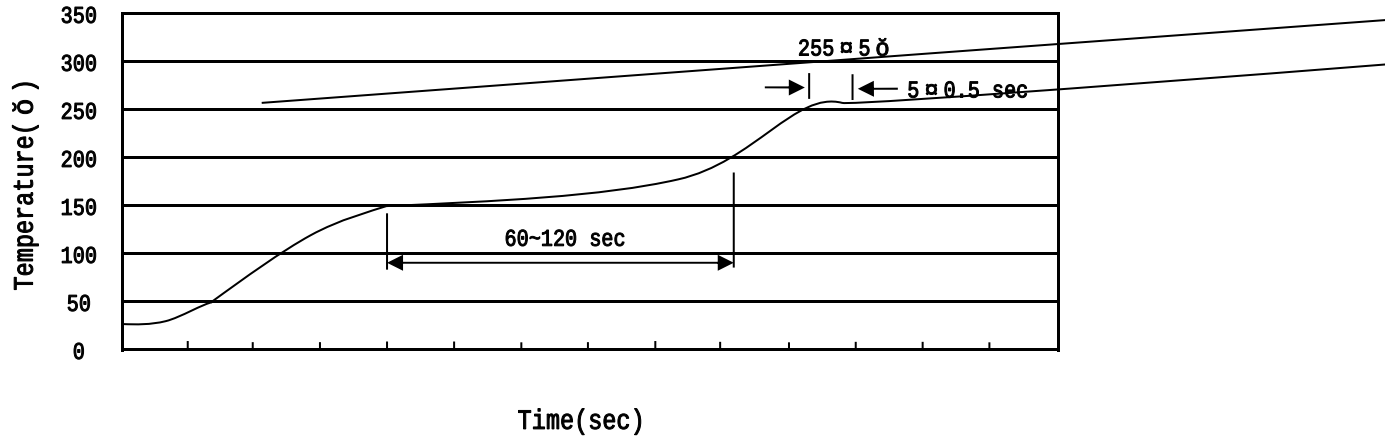
79D05

****

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
79D05:	Product Type
****:	Lot No. Code, code change with Lot No

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



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 mm³)
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension		(unit mm³)
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices