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: 5 .> / / x 9 ² … ˜ož Voltage Regulator in a TO-92 Plastic Package.

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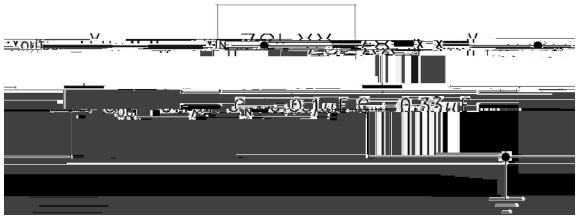
3-Terminal regulators ,output current up to 100 mA, internal thermal overload protection and short-circuit limiting.

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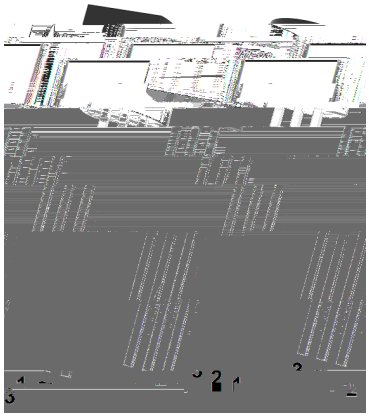
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Voltage Regulator.

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PIN1 y IN PIN 2 y GND PIN 3 y OUT

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See Marking Instructions.

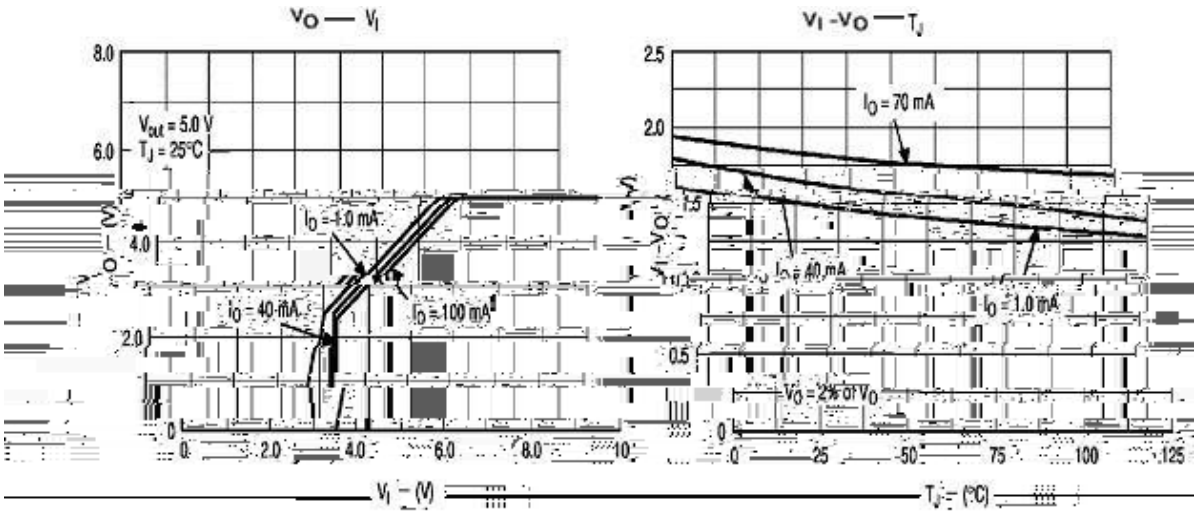
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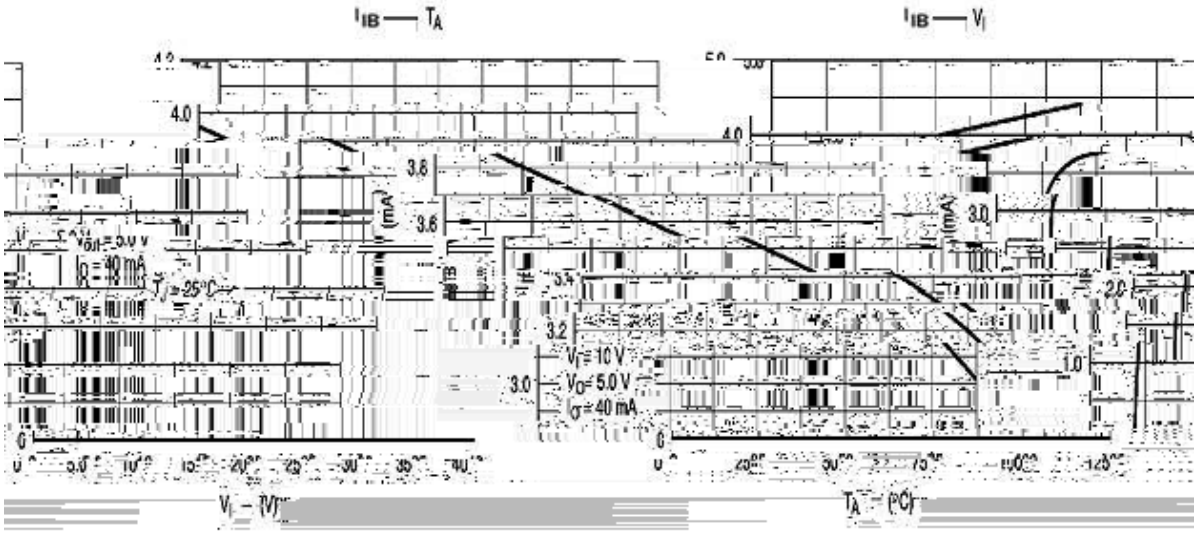
@ ƒ Parameter	… Z Symbol	ƒ › Rating	% y Unit
Input voltage	V_I	30	V
Output current	I_O	100	mA
Operating Temperature Range	T_{OPR}	-40 125	
Power Dissipation	P_D	500	mW
Storage temperature range	T_{stg}	-65 150	

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@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Output voltage	V_O	I_o Ù40mA T_j=25	4.80	5.0	5.2	V
		I_O=1mA to 40mA V_I=7V to 20V	4.75	5.0	5.25	V
		I_O=1mA to 70mA V_I=10V	4.75	5.0	5.25	V
Input regulation	. Vo	V_I=7V to 20V T_j=25		32	150	mV
		V_I=8V to 20V T_j=25		26	100	mV
Output regulation	. V_O	I_O=1mA to 100mA T_j=25		15	60	mV
		I_O=1mA to 40 mA T_j=25		8	30	mV
Ripple rejection	RR	V_I=8V to 18V f=120Hz T_j=25	41	49		dB
Output noise voltage	V_N	f=10Hz-100KHz T_j=25		42		V
Dropout voltage	V_D	T_j=25		1.7		V
Bias current	I_Q	T_j=25		3.8	6	mA
		T_j=125			5.5	mA
Bias current change	. I_Q	V_I=8V to 20V			1.5	mA
		I_O=1mA to 40mA			0.1	mA

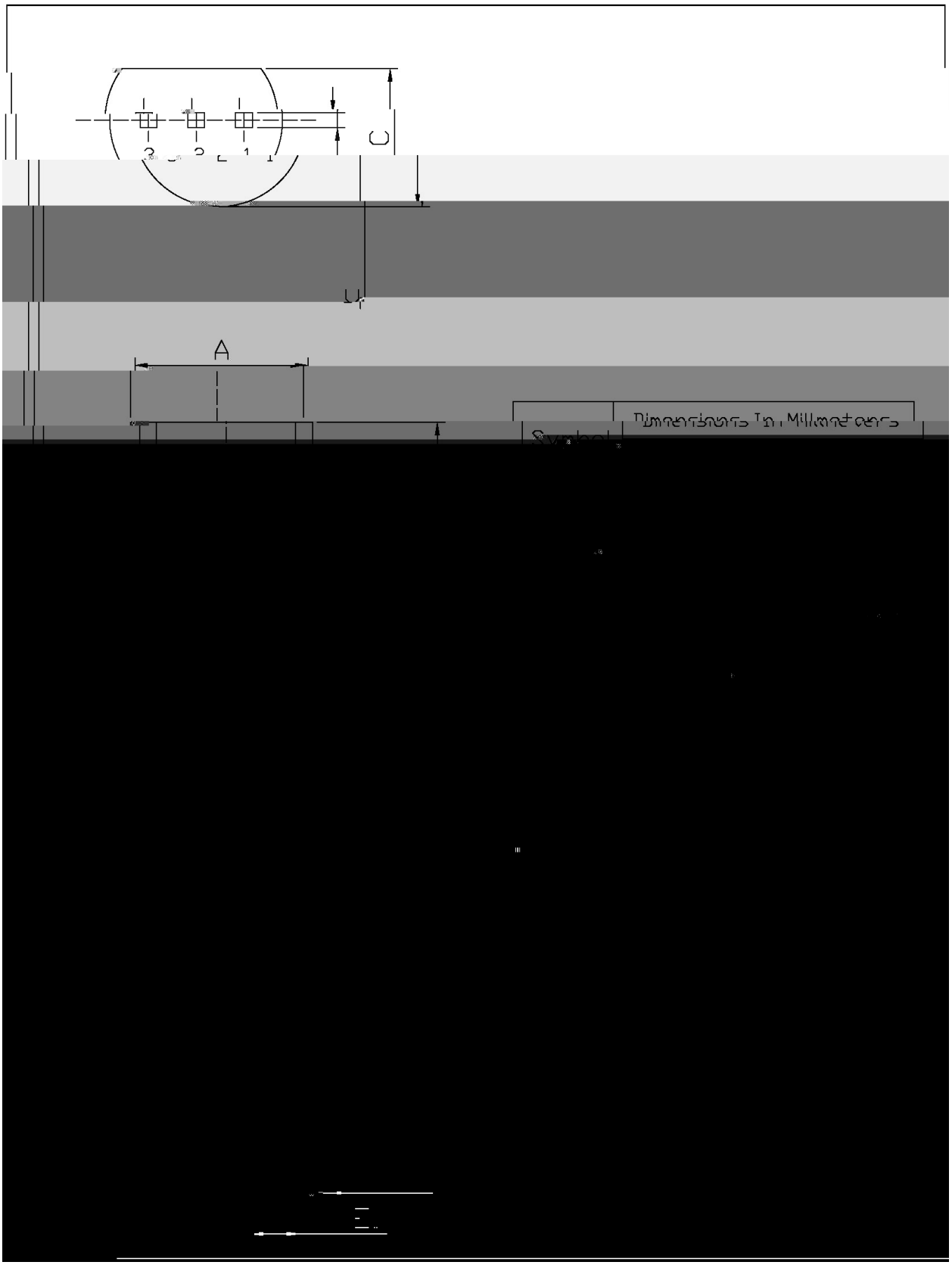
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VO — VI
VI -VO — TJ
VOUT = 5.0 V
TJ = 25°C
IO = 1.0 mA
IO = 40 mA
IO = 100 mA
IO = 70 mA
VO = 2% of VO
VI – (V)
TJ = (°C)

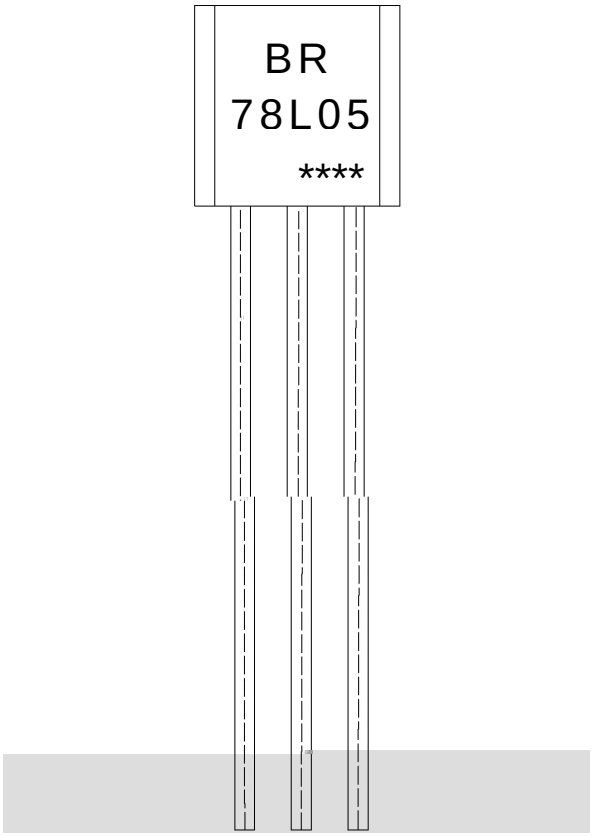

IIB — TA
IIB — VI
VOUT = 5.0 V
IO = 40 mA
TJ = 25°C
VI = 10 V
VO = 5.0 V
IO = 40 mA
VI – (V)
TA = (°C)

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TO-92 Unit: mm



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Note:

BR:	Company Code
78L05:	Product Type
****:	Lot No. Code, code change with Lot No

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ª ¢ y

1o• Ä ½ “ † 25 ½150 - k ž • 60 ½90sec;

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:25~150 - , Time:60~90sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »]

“ † y 270 r5 - ž • y 10 r1 sec. Temp.:270±5 Time:10±1 sec

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• ^ x / BULK