



**Negative Three Terminal Voltage Regulators**
**79M05/79M12**
**79M05 Electrical Characteristics**
*(Vin= -10V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)*

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Output voltage	Vout	Tj=25°C	-4.80	-5	-5.20	V	
		-7.5V≤Vin≤-20V, 10mA≤Iout≤1A, PD≤15W	-4.75	-5	-5.25		
Line Regulation	REGline	Tj=25°C	-7.5V≤Vin≤-25V	--	3	100	mV
			-8V≤Vin≤-12V	--	1	50	
Load Regulation	REGload	Tj=25°C	10mA≤Iout≤1A	--	15	100	mV
			250mA≤Iout≤750mA	--	5	50	
Quiescent Current	Iq	Iout=0, Tj=25°C	--	4	8	mA	
Quiescent Current Change	ΔIq	-7.5V≤Vin≤-25V	--	--	1.3		
		10mA≤Iout≤1A	--	--	0.5		
Output Noise Voltage	Vn	10Hz≤f≤100KHz, Tj=25°C	--	40	--	μV	
Ripple Rejection Ratio	RR	f=120Hz, -8V≤Vin≤-18V	62	74	--	dB	
Voltage Drop	Vdrop	Iout=1A, Tj=25°C	--	2	--	V	
Output Short Circuit Current	Ios	Tj=25°C	--	750	--	mA	
Peak Output Current	I <sub>o peak</sub>	Tj=25°C	--	2.1	--	A	
Temperature Coefficient of Output Voltage	ΔVout/ ΔTj	Iout=10mA, 0°C≤Tj≤125°C	--	-0.1	--	mV/ °C	

**79M12 Electrical Characteristics**
*(Vin= -19V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)*

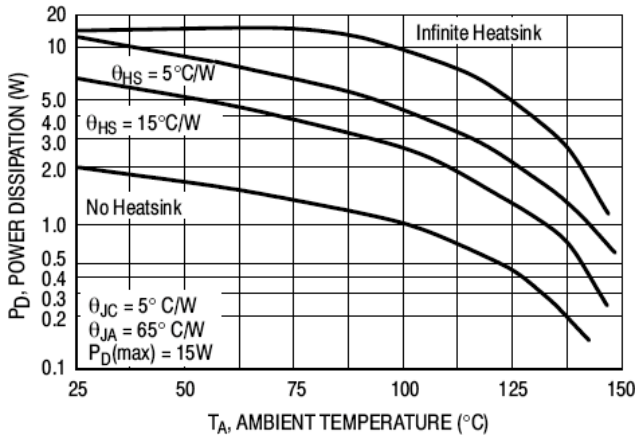
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Output Voltage	Vout	Tj=25°C	-11.53	-12	-12.48	V	
		-14.5V≤Vin≤-27V, 10mA≤Iout≤1A, PD ≤15W	-11.42	-12	-12.60		
Line Regulation	REGline	Tj=25°C	-14.5V≤Vin≤-30V	--	10	240	mV
			-15V≤Vin≤-19V	--	3	120	
Load Regulation	REGload	Tj=25°C	10mA≤Iout≤1A	--	12	240	mV
			250mA≤Iout≤750mA	--	4	120	
Quiescent Current	Iq	Tj=25°C, Iout=0	--	4.3	8	mA	
Quiescent Current Change	ΔIq	-14.5V≤Vin≤-30V	--	--	1		
		10mA≤Iout≤1A	--	--	0.5		
Output Noise Voltage	Vn	10Hz≤f≤100KHz, Tj=25°C	--	75	--	uV	
Ripple Rejection Ratio	RR	f=120Hz, -15V≤Vin≤-25V	55	70	--	dB	
Voltage Drop	Vdrop	Iout=1A, Tj=25°C	--	2	--	V	
Output Short Circuit Current	Ios	Tj=25°C	--	350	--	mA	
Peak Output Current	I <sub>o peak</sub>	Tj=25°C	--	2.1	--	A	
Temperature Coefficient of Output Voltage	ΔVout/ ΔTj	Iout=10mA, 0°C≤Tj≤125°C	--	-1	--	mV/ °C	

- Pulse testing techniques are used to maintain the junction temperature as close to the ambient temperature as possible, and thermal effects must be taken into account separately.
- This specification applies only for DC power dissipation permitted by absolute maximum ratings.

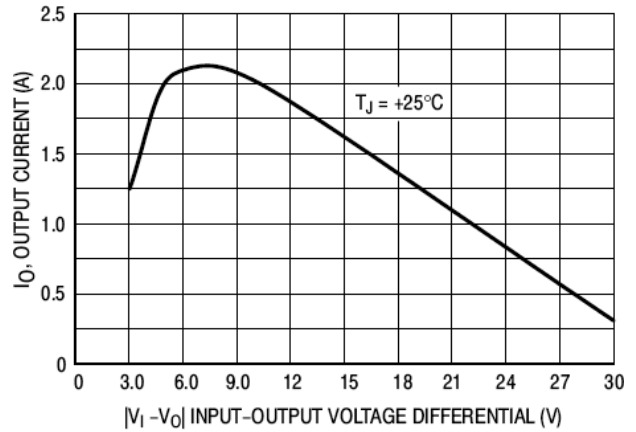
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**79M05/79M12**

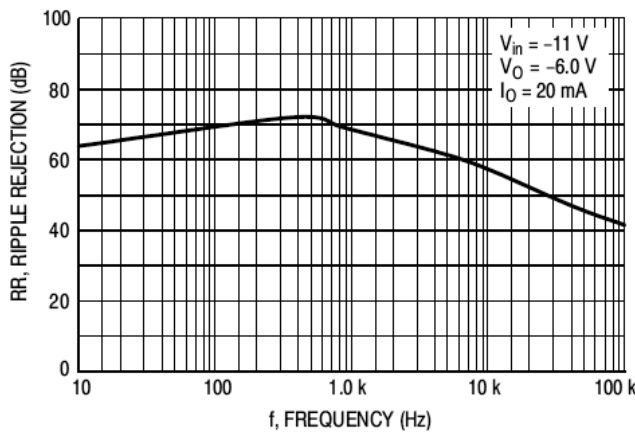
**Electrical Characteristics Curve**



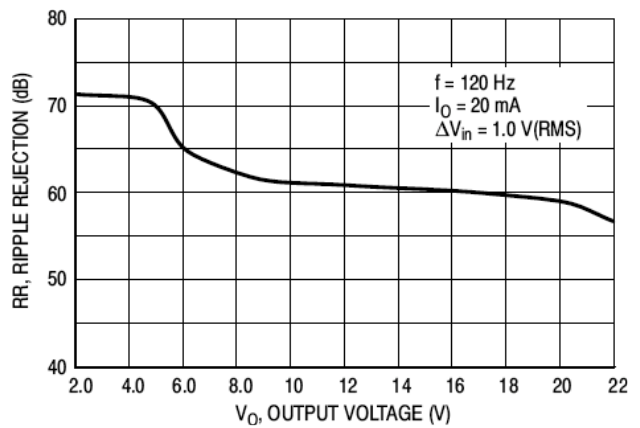
**Figure 1. Worst Case Power Dissipation as a Function of Ambient Temperature**



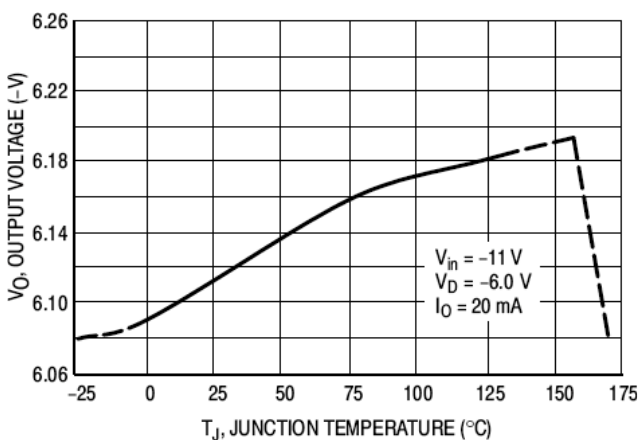
**Figure 2. Peak Output Current as a Function of Input-Output Differential Voltage**



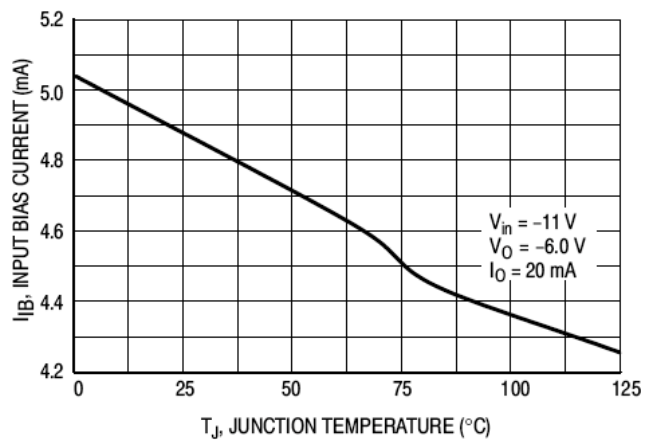
**Figure 3. Ripple Rejection as a Function of Frequency**



**Figure 4. Ripple Rejection as a Function of Output Voltage**



**Figure 5. Output Voltage as a Function of Junction Temperature**



**Figure 5. Output Voltage as a Function of Junction Temperature**