



## Electrical Characteristics

**G79L05** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}= -10\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-4.85	-5.0	-5.15	V	$V_{in}= -10\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-7\text{V} \leq V_{in} \leq -20\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}= -10\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-4.75	-	-5.25		
$\Delta\text{VO}$ (Line Regulation)		-	15	150	mV	$-7\text{V} \leq V_{in} \leq -20\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	20	60	mV	$V_{in}= -10\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.0	mA	$V_{in}= -10\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}= -10\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-8\text{V} \leq V_{in} \leq -20\text{V}$ , $I_o=40\text{mA}$
Vn		-	40	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		41	49	-	dB	$-8\text{V} \leq V_{in} \leq -18\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L06** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}= -11\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-5.82	-6.0	-6.18	V	$V_{in}= -11\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-8\text{V} \leq V_{in} \leq -20\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}= -11\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-5.70	-	-6.30		
$\Delta\text{VO}$ (Line Regulation)		-	20	150	mV	$-8\text{V} \leq V_{in} \leq -20\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	21	60	mV	$V_{in}= -11\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.0	mA	$V_{in}= -11\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}= -11\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-9\text{V} \leq V_{in} \leq -20\text{V}$ , $I_o=40\text{mA}$
Vn		-	44	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		40	48	-	dB	$-9\text{V} \leq V_{in} \leq 19\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L08** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}= -14\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-7.76	-8.0	-8.24	V	$V_{in}= -14\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-10.5\text{V} \leq V_{in} \leq -23\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}= -14\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-7.60	-	-8.40		
$\Delta\text{VO}$ (Line Regulation)		-	42	175	mV	$-10.5\text{V} \leq V_{in} \leq -23\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	30	80	mV	$V_{in}= -14\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.0	mA	$V_{in}= -14\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}= -14\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-11\text{V} \leq V_{in} \leq -23\text{V}$ , $I_o=40\text{mA}$
Vn		-	54	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		37	46	-	dB	$-11\text{V} \leq V_{in} \leq -21\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L09** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}=-15\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-8.73	-9.0	-9.27	V	$V_{in}=-15\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-11.5\text{V} \leq V_{in} \leq -24\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}=-15\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-8.55	-	-9.45		
$\Delta\text{VO}$ (Line Regulation)		-	42	200	mV	$-11.5\text{V} \leq V_{in} \leq -24\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	30	90	mV	$V_{in}=-15\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.0	mA	$V_{in}=-15\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}=-15\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-12\text{V} \leq V_{in} \leq -24\text{V}$ , $I_o=40\text{mA}$
Vn		-	54	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		37	46	-	dB	$-12\text{V} \leq V_{in} \leq -22\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L12** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}=-19\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-11.64	-12.0	-12.36	V	$V_{in}=-19\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-14.5\text{V} \leq V_{in} \leq -27\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}=-19\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-11.40	-	-12.60		
$\Delta\text{VO}$ (Line Regulation)		-	50	250	mV	$-14.5\text{V} \leq V_{in} \leq -27\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	24	100	mV	$V_{in}=-19\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.5	mA	$V_{in}=-19\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}=-19\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-16\text{V} \leq V_{in} \leq -27\text{V}$ , $I_o=40\text{mA}$
Vn		-	80	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		37	42	-	dB	$-15\text{V} \leq V_{in} \leq -25\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L15** (Refer to the test circuits,  $T_j=0\sim 125^\circ\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}=-23\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-14.55	-15.0	-15.45	V	$V_{in}=-23\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$ $-17.5\text{V} \leq V_{in} \leq -30\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}=-23\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-14.25	-	-15.75		
$\Delta\text{VO}$ (Line Regulation)		-	65	300	mV	$-17.5\text{V} \leq V_{in} \leq -30\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	25	150	mV	$V_{in}=-23\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^\circ\text{C}$
IQ		-	-	6.5	mA	$V_{in}=-23\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^\circ\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}=-23\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-20\text{V} \leq V_{in} \leq -30\text{V}$ , $I_o=40\text{mA}$
Vn		-	90	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		34	39	-	dB	$-18.5\text{V} \leq V_{in} \leq -28.5\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^\circ\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^\circ\text{C}$

**G79L18** (Refer to the test circuits,  $T_j=0\sim 125^{\circ}\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}=-27\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-17.46	-18.0	-18.54	V	$V_{in}=-27\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$ $-20.5\text{V} \leq V_{in} \leq -33\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}=-27\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-17.10	-	-18.9		
$\Delta\text{VO}$ (Line Regulation)		-	70	300	mV	$-20.5\text{V} \leq V_{in} \leq -33\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	27	170	mV	$V_{in}=-27\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^{\circ}\text{C}$
IQ		-	-	6.5	mA	$V_{in}=-27\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}=-27\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-21\text{V} \leq V_{in} \leq -33\text{V}$ , $I_o=40\text{mA}$
Vn		-	150	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		33	48	-	dB	$-23\text{V} \leq V_{in} \leq -33\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^{\circ}\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^{\circ}\text{C}$

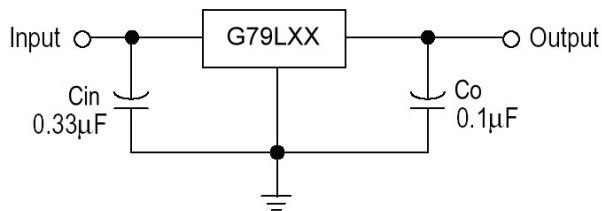
**G79L24** (Refer to the test circuits,  $T_j=0\sim 125^{\circ}\text{C}$ ,  $I_o=40\text{mA}$ ,  $V_{in}=-33\text{V}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_o=0.1\mu\text{F}$  unless otherwise specified) (Note1)

Symbol		Min.	Typ.	Max.	Unit	Test Conditions
VO	A-Rank (3%)	-23.28	-24.0	-24.72	V	$V_{in}=-33\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$ $-27\text{V} \leq V_{in} \leq -38\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$ $V_{in}=-33\text{V}$ , $1\text{mA} \leq I_o \leq 70\text{mA}$ (Note2)
	B-Rank (5%)	-22.80	-	-25.20		
$\Delta\text{VO}$ (Line Regulation)		-	90	350	mV	$-27\text{V} \leq V_{in} \leq -38\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$
$\Delta\text{VO}$ (Load Regulation)		-	40	200	mV	$V_{in}=-33\text{V}$ , $1\text{mA} \leq I_o \leq 100\text{mA}$ , $T_j=25^{\circ}\text{C}$
IQ		-	-	6.5	mA	$V_{in}=-33\text{V}$ , $I_o=40\text{mA}$ , $T_j=25^{\circ}\text{C}$
$\Delta\text{IQ}$		-	-	0.1	mA	$V_{in}=-33\text{V}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$
		-	-	1.5		$-28\text{V} \leq V_{in} \leq -38\text{V}$ , $I_o=40\text{mA}$
Vn		-	200	-	$\mu\text{V}$	$10\text{Hz} \leq f \leq 100\text{KHz}$
RR		31	47	-	dB	$-29\text{V} \leq V_{in} \leq -35\text{V}$ , $I_o=40\text{mA}$ , $f=120\text{Hz}$ , $T_j=25^{\circ}\text{C}$
VD		-	1.7	-	V	$I_o=100\text{mA}$ , $T_j=25^{\circ}\text{C}$

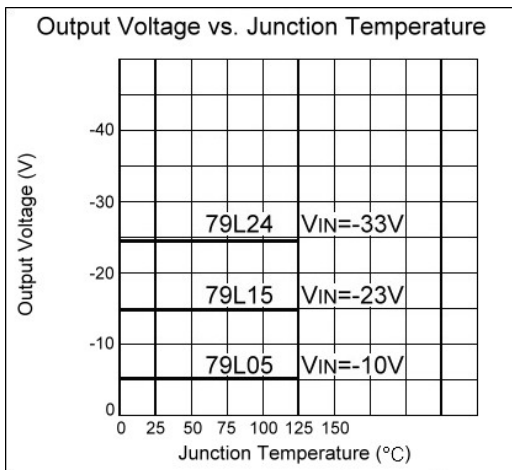
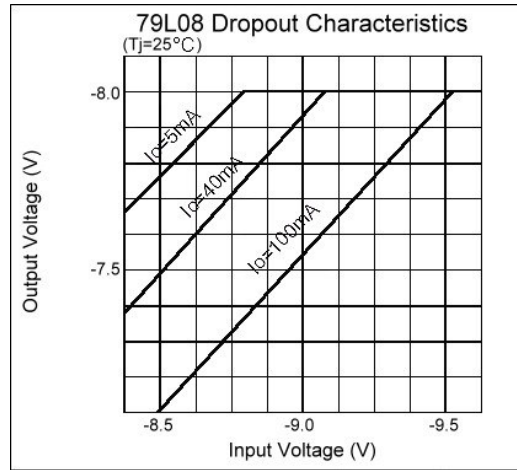
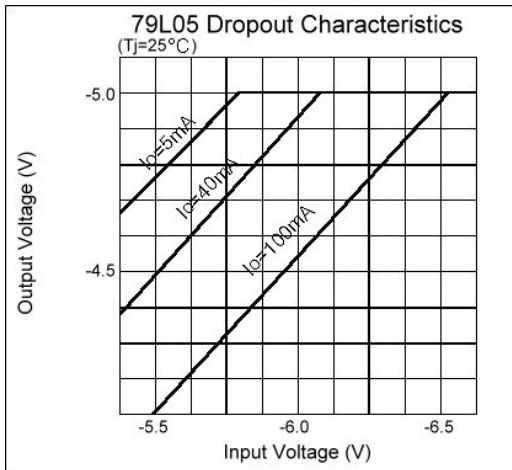
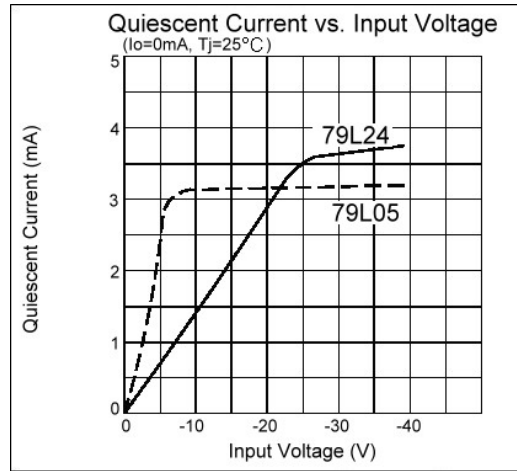
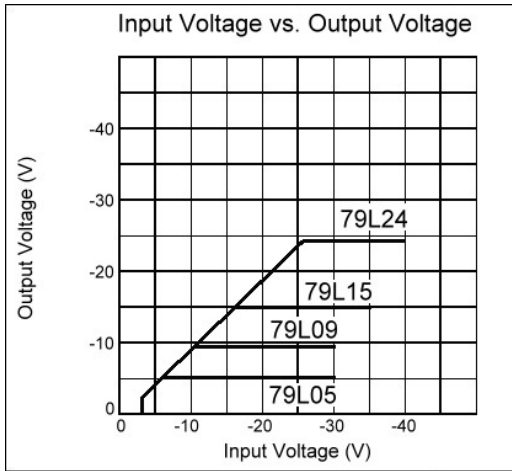
Note1: The Maximum steady state usable output current is dependent on input voltage, heat sinking, lead length of the package and copper of PCB. The data above represent pulse test conditions with junction temperatures specified at the initiation of test.

Note2: Power dissipation < 0.625W

## Typical Application



## Characteristics Curve



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