

**IR Half Bridge Driver IC Parameters (all: dv/dt=50V/ns C<sub>L</sub>=1nF)**

P/N	IR2010	IR2011	IRS2011	IRS20124		IR2110 *IR2113	IR2213	IR2181 *IR21814	IR2183 *IR21834	IR2184 *IR21844
<b>VB Range</b>	Com-0.3 Com+225	Com-0.3 Com+250	Com-0.3 Com+220	Com-0.3 Com+220		Com-0.3 Com+*(6)525	Com-0.3 Com+1225	Com-0.3 Com+625	Com-0.3 Com+625	Com-0.3 Com+625
<b>VS Range</b>	VB-25 VB+0.3	VB-25 VB+0.3	VB-20 VB+0.3	VB-20 VB+0.3		VB-25 VB+0.3	VB-25 VB+0.3	VB-25 VB+0.3	VB-25 VB+0.3	VB-25 VB+0.3
<b>Vcc Range</b>	Com-0.3 Com+25	Com-0.3 Com+25	Com-0.3 Com+20	Com-0.3 Com+20		Com-0.3 Com+25	Com-0.3 Com+25	Com-0.3 Com+25	Com-0.3 Com+25	Com-0.3 Com+25
<b>Vdd Range</b>	Com-0.3 Vss+25	-	-	-		Com-0.3 Vss+25	Com-0.3 Vss+25	-	-	-
<b>Vss Range</b>	Vcc-25 Vcc+0.3	-	-	-		Vcc-25 Vcc+0.3	Vcc-25 Vcc+0.3	* Vcc-25 Vcc+0.3	* Vcc-25 Vcc+0.3	* Vcc-25 Vcc+0.3
<b>Inputs Range</b>	Vss-0.3 Vdd+0.3	Com-0.3 Vcc+0.3	Com-0.3 Vcc+0.3	Com-0.3 Vcc+0.3		Vss-0.3 Vdd+0.3	Vss-0.3 Vdd+0.3	Com *Vss -0.3/+10	Com *Vss -0.3/+10	Com *Vss -0.3/+10
<b>Td on</b>	95ns	80ns	60ns	60ns		120ns	280ns	180ns	180ns	680ns * 180ns+Tdt
<b>Td off</b>	65ns	75ns	60ns	60ns		94ns	225ns	220ns	220ns	270ns
<b>Tsd</b>	70ns	-	-	140ns		110ns	230ns	-	-	180ns
<b>Tr</b>	10ns	35ns	25ns	25ns		25ns	25ns	40ns	40ns	40ns
<b>Tf</b>	15ns	20ns	15ns	15ns		17ns	17ns	20ns	20ns	20ns
<b>Tdt</b>	-	-	-	15/25/35/45ns Vcc:(.89/.57/.36/.23)		-	-	-	500ns * 400ns (0) to 5us (200k)	* 400ns (0) to 5us (200k)
<b>Input Types</b>	Hin Lin SD	Hin Lin	Hin Lin	In SD/DT		Hin Lin SD latching	Hin Lin SD latching	Hin Lin	Hin Lin\ * DT	In SD\ * DT
<b>V<sub>IH</sub></b>	Vdd·9.5 /15 Vdd·2/3.3	2.2	2.5	2.5		Vdd·9.5/15	Vdd·9.5/15	2.7	2.7	2.7
<b>V<sub>IL</sub></b>	Vdd·6.0/15 Vdd·1/3.3	0.7	1.2	1.2		Vdd·6.0/15	Vdd·6.0/15	0.8	0.8	0.8
<b>Vsat<sub>H</sub></b>	1.0	2.0	1.2	1.2		1.2	1.2	1.2	1.2	1.2
<b>Vsat<sub>L</sub></b>	0.1	0.2/20m	0.1	0.1		0.1	0.1	0.1	0.1	0.1
<b>Vos / Ios</b>	200/50u	200/50u	200/50u	200/50u		*(6)500/50u	1200/50u	600/50u	600/50u	600/50u
<b>VB / IB</b>	15/70u	15/90u	15/120u	15/500u		15/125u	15/125u	15/60u	15/60u	15/60u
<b>Vcc / Icc</b>	15/100u	15/140u	15/200u	15/2000u		15/180u	15/180u	15/120u	15/1000u	15/1000u
<b>Vdd / Idd</b>	15/1u	-	-	-		15/15u	15/15u	-	-	-
<b>Vin / Iin</b>	15/20u	3.3/7u	3.3/3u	3.3/3u		15/20u	15/20u	5/25u	5/5u	5/5u
<b>UVrise</b>	8.6	9.0	9.0	9.0		8.6 VB 8.5 Vcc	10.2	8.9	8.9	8.9
<b>UVfall</b>	8.2	8.2	8.2	8.2		8.2 VB 8.2 Vcc	9.3	8.2	8.2	8.2
<b>Io+</b>	3.0	1.0	1.0	1.0		2.5	2.0	1.9	1.9	1.9
<b>Io-</b>	3.0	1.0	1.0	1.2		2.5	2.5	2.3	2.3	2.3
<b>Notes:</b>				OC: 2.21Vos 280ns delay 200ns filter 100ns minPW					Lin\ pulled up to +5V	SD\ pulled up to +5V