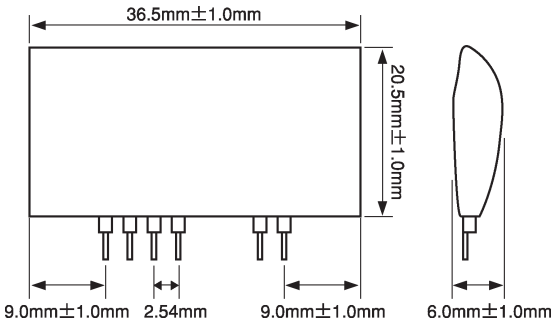
GH-038

SanRex Hybrid Gate Driver IC for IGBT

- High Voltage isolation by Photo Coupler
- Enable to drive IGBT up to dual 300A module
- Operate with single power source
- Support to high-density system design
- Built-in opto coupler input resistor （330Ω）



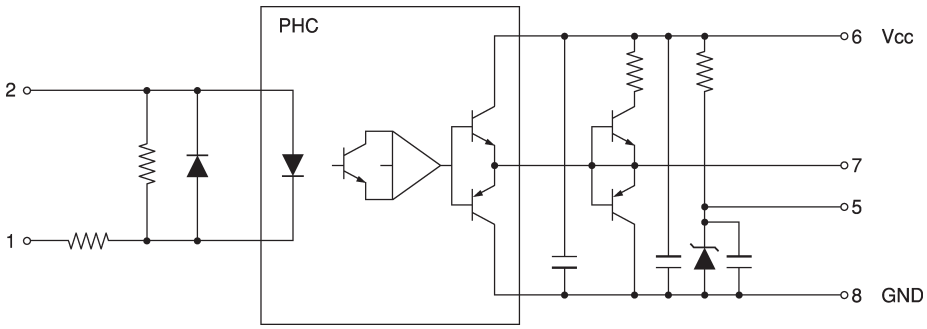
※The model name is indicated on the back of the product.

■Maximum Ratings

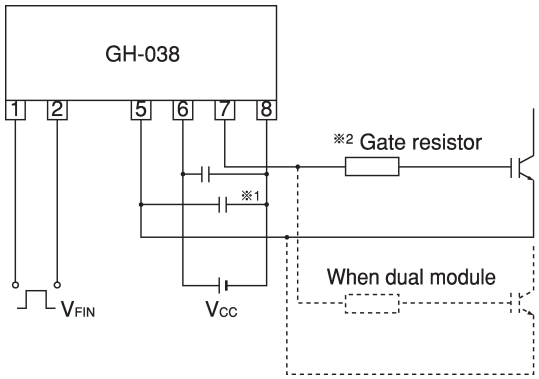
（Unless otherwise Tj＝25℃）

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
V_{CC}	Supply Voltage		23.0	26.0	28.0	V
V_{OH}	Forward Bias Output Voltage	V_{CC}＝26.0V	16.0	18.0	19.0	V
V_{RB}	Reverse Bias Supply Voltage	V_{CC}＝26.0V	7.0	8.0	9.0	V
V_{FIN}	Photo Coupler Input Voltage			5.0	7.0	V
I_F	Photo Coupler Input Current	V_{FIN}＝5.0V	9.0	10.6	12.2	mA
I_g1	Output Forward Current	PW＝2μs，Dutycycle＜0.05		4.0	6.0	A
I_g2	Output Reverse Current	PW＝2μs，Dutycycle＜0.05		4.0	6.0	A
t_{PLH}	Switching Time-High side	V_{CC}＝26.0V，I_F＝10mA			1.5	μs
t_{PHL}	Switching Time-Low side	V_{CC}＝26.0V，I_F＝10mA			1.5	μs
tr	Rise Time	V_{CC}＝26.0V，I_F＝10mA			1.0	μs
tf	Fall Time	V_{CC}＝26.0V，I_F＝10mA			1.0	μs
dv/dt	Common Mode Transient immunity		5k	10k		V/μs
Visc	Input／Output Isolation Voltage	AC50/60Hz，1minute	AC2500			V
Topr	Operational Ambient Temperature		−25～＋80			℃
Tstg	Storage Temperature		−40～＋125			℃

■Equivalent Circuit

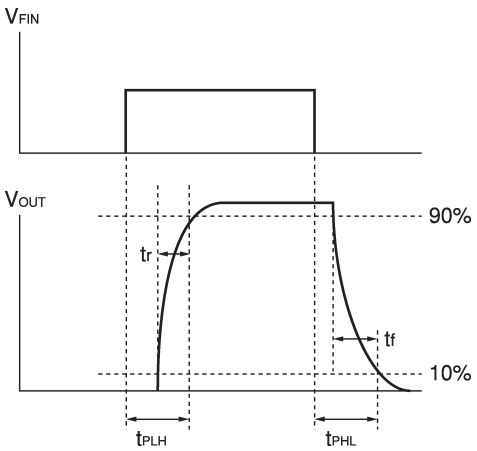


■Examble of Application



※1 To assure required voltage the capacitor （>10 μF） hase to be connected as close to the Driver IC as possible.

※2 For the value of gate resistor, the resistance value described in IGBT Module specification is recommended. The gate resistance should be determined at less than 6A of peak output current judging from signal delay time and surge voltage.



・Switching wave form