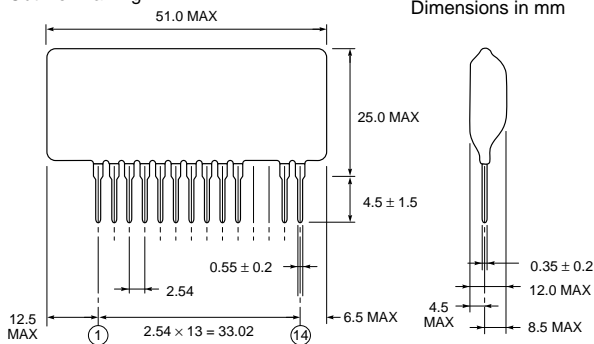


Dimensions in mm



V_{CES} = 1400V Series
(up to 200A Class)

HYBRID IC FOR DRIVING IGBT MODULES

Absolute Maximum Ratings, $T_a = 25^\circ\text{C}$ unless otherwise specified

Item	Symbol	Test Conditions	Limit	Units
Supply Voltage*	V_{CC}	DC	18	Volts
	V_{EE}	DC	-15	Volts
Input Voltage	V_I		-1 ~ 7	Volts
Output Voltage	V_O	Output Voltage "H"	V_{CC}	Volts
Output Current	I_{OHP}	Pulse Width 2 μs , $f = 20\text{kHz}$	-5	Amperes
	I_{OLP}	Pulse Width 2 μs , $f = 20\text{kHz}$	5	Amperes
Output Current	I_{OH}	$f = 20\text{kHz}$, 50% Duty Cycle	0.5	Amperes
Isolation Voltage	V_{RMS}	Sinewave Voltage 60Hz, 1 min.	2500	Volts
Junction Temperature	T_j		85	$^\circ\text{C}$
Operating Temperature	T_{opr}	(Differs from H/C Condition)	-20 ~ 60	$^\circ\text{C}$
Storage Temperature	t_{stg}		-25 ~ 100	$^\circ\text{C}$
Fault Output Current	I_{FO}		20	mA
Input Voltage	V_{R1}		50	Volts

*20 Volts $\leq V_{CC} + V_{EE} \leq 28$ Volts

Electrical Characteristics, $T_a = 25^\circ\text{C}$, $V_{CC} = 15\text{V}$, $-V_{EE} = 10\text{V}$ unless otherwise specified

Characteristics	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Supply Voltage	V_{CC}	Recommended Range	14	15	—	Volts
	V_{EE}	Recommended Range	-7	—	-10	Volts
Pull-up Voltage on Input Side	V_{IN}	Recommended Range	4.75	5.00	5.25	Volts
"H" Input Current	I_{IH}	$V_{IN} = 5\text{V}$, $R = 185\Omega$	—	16	—	mA
"H" Output Voltage	V_{OH}		13	14	—	Volts
"L" Output Voltage	V_{OL}		-8	-9	—	Volts
Internal Power Dissipation	P_D	$f = 20\text{kHz}$,	—	2.38	—	Watts
		Module 400A, 1200V IGBT				
"L-H" Propagation Time	t_{PLH}	$V_I = 0$ to 4V, $T_j \pm 85^\circ\text{C}$	—	1.0	1.5	μs
"L-H" Rise Time	t_r	$V_I = 0$ to 4V, $T_j \pm 85^\circ\text{C}$	—	0.6	1.0	μs
"H-L" Propagation Time	t_{PHL}	$V_I = 0$ to 4V, $T_j \pm 85^\circ\text{C}$	—	1.0	1.5	μs
"H-L" Rise Time	t_r	$V_I = 0$ to 4V, $T_j \pm 85^\circ\text{C}$	—	0.4	1.0	μs
Reset Time of Protection	t_{RESET}		1	—	2	ms
Fault Output Current	I_{FO}		—	5	—	mA
SC Voltage	V_{SC}		15	—	—	Volts