

Technical Specifications for MHVSW-DE030 Switch
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				<i>Unit</i>	
Max Voltage Across Terminals	$V_{i(max)}$			30000	Volts
Break Down Voltage	V_{bd}			31500	Volts
Isolation Voltage	V_i	Maximum Voltage (\pm) from ground		>40000	Volts
Maximum Peak Current	I_{peak}	See safe operation document		30	Amps
Maximum Continuous Current	I_C	@ 25° C		0.31	Amps
On Resistance	R_O	Temperature, voltage and current dependent		52.5	Ω
Turn on delay time	$t_{d(on)}$			<100	ns
Turn on rise time	$t_{r(on)}$			20	ns
Turn off delay time	$t_{d(off)}$			<100	ns
Turn off rise time	$t_{r(off)}$			~10	μ s
On Time	t_{on}	Other times available on request		10	μ s
Turn on jitter	$t_{j(on)}$			<400	ps
Maximum Continuous Switching Frequency	$f_{(max)}$	Limited by maximum power dissipation, High burst frequencies possible		20	kHz
Maximum Continuous Power Dissipation	P_{max}	Total power dissipation into switch. We suggest temperature monitoring for $P_d > 5$ Watts		15	Watts
Operating Temperature Range	T_O			70,-30	° C
Switch Capacitance	C_s				pF
Coupling Capacitance	C_c				pF
Supply Voltage	V_{sup}	± 0.25 volts		5	Volts
Supply Current	C_{sup}	@ $f_{(max)}$ (preliminary)		< 0.5	Amps
Trigger Signal	V_{trig}	74LVC input, 1k Ω pull-down resistor		3 – 6	Volts
Fault Signal	V_{fault}	Push-Pull Output, 0.25 Amp max Low = Fault		L = 0.5 H = 4.5	Volts
Dimensions		140 x 102 x 35			mm ³