

BH6578FVM

Optical disc ICs

1- channel loading driver IC

BH6578FVM

BH6578FVM is an 1-channel loading driver IC with setting pin that can change output voltage.
Adoption of small MSOP8 package enables to reduce space in the sets.

●Applications

CD/DVD slim

●Features

- 1) MOS output wide dynamic range loading driver ($R_{ON}=1\Omega$ (TOP+Bottom))
- 2) With output voltage setting pin
- 3) Built-in thermal shutdown circuit

●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	7	V
Power dissipation	P_d	550 *	mW
Operating temperature range	T_{opr}	$-35\sim+85$	$^\circ\text{C}$
Storage temperature range	T_{stg}	$-55\sim+150$	$^\circ\text{C}$

* Derating: 4.4mW/ $^\circ\text{C}$ for operation above $T_a=25^\circ\text{C}$

●Recommended operating conditions

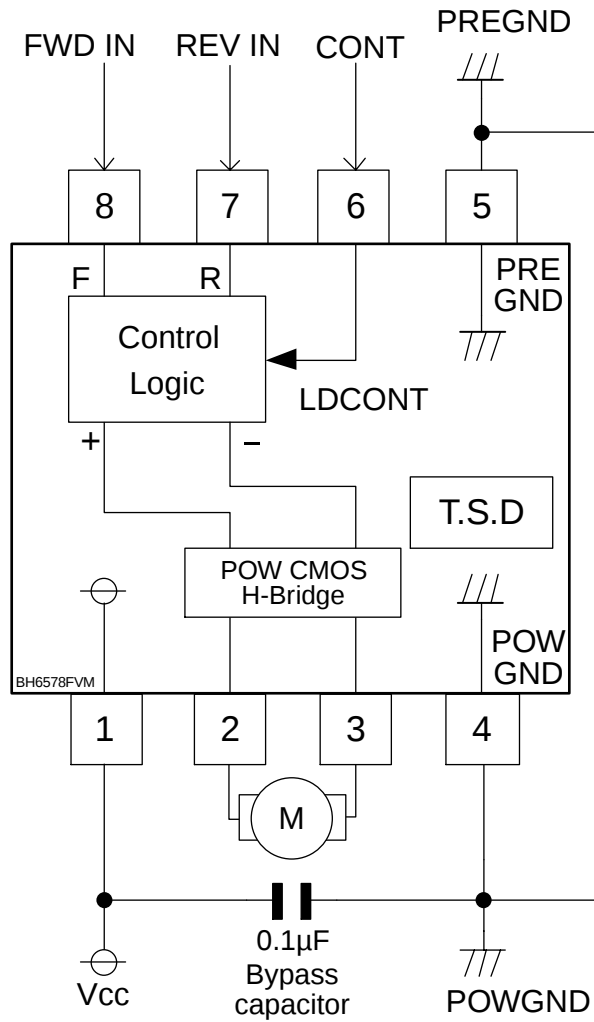
Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	V_{CC}	4.5	5.0	5.5	V

●Electrical characteristics (unless otherwise noted, $T_a=25^\circ\text{C}$, $V_{CC}=5\text{V}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current at no signal	I_{CC}	—	0.4	0.8	mA	
Output offset voltage	$VOFSL$	-15	0	+15	mV	Brake mode
ON resistance	R_{ON}	—	1.0	1.8	Ω	$I_o=500\text{mA}$, Top+Bottom
Voltage gain	$GVLD$	4.5	6.0	7.5	dB	CONT=1V
Positive/negative voltage differential gain	$\Delta GVLD$	-2.0	0	2.0	dB	
Input pin inflow current	I_{NL}	—	86	120	μA	$F_{IN}=R_{IN}=5\text{V}$
LDCONT pin outflow current	I_{LDC}	—	—	300	nA	CONT=2V

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●Application Circuit



●External dimensions (Units : mm)

