MC – 55SH (MC04AP050AI-C1KB15)

Absolute Maximum Ratings (Not Recommended[1])

Parameter	Symbol	Value	Unit
		50A	
Positive Supply Voltage	V_{CC}	+12 ~ +18	V
Negative Supply Voltage	V_{EE}	-12 ~ -18	V
Maximum Output Load (@25°C)[2]	R_{Lmax}	100	Ω
Maximum Primary Current (@) R_{Lmax}	I_{Pmax}	± 80	A
r. m. s. Voltage for AC Isolation (60Hz)	V_{Dmax}	1,500	V_{AC}
Electrostatic Discharge	$V_{discharge}$	3	kV
Ambient Operating Temperature	T_A	−30~85	°C
Ambient Storage Temperature	T_S	−30~95	°C

NOTES 1. Maximum ratings are those values beyond which device damage can occur.

2. $R_{Lmax} \leq \frac{K_N\,(\min(V_{CC}\ |V_{EE}|)-5}{|I_{Pmax}|} - \left(\frac{T_A+273}{10}\right) \pm \alpha$

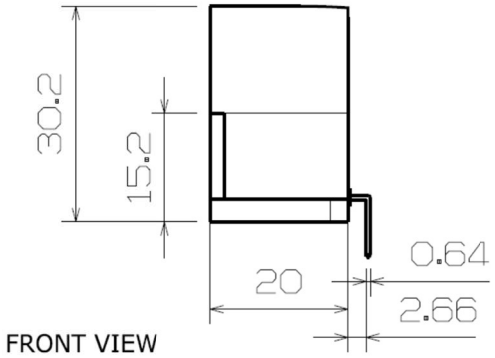
Electrical Characteristics(V_{CC} = +15, V_{EE} = -15, T_A = 25°C)

Parameter	Symbol	Value	Unit
		50A	
Primary Nominal Current	I_{PN}	50	A
Secondary Conversion Turn Number	K_N	1,000	Turns
Output Current at I_{PN}	I_O	I_{PN}/K_N	A
Current Consumption	I_C	±20± I_O	mA
Recommended Load Resistance at I_{PN}[3]	R_L	80	Ω
Accuracy at (@25°C) I_{PN}	X_G	≤±0.05	%
Offset Current	I_{OS}	≤±5	μA
Output Linearity Error at (@25°C) I_{PN}	$_L\varepsilon$	±150	ppm
Temperature Coefficient Ratio at I_{PN}	TCR	±0.005	%/°C
Response Time (@90% of I_{PN})	T_r	≥ 1	μs
di/dt Accurately followed	*di/dt*	50	A/μs
Frequency Bandwidth (@-3dB)	$f_{cut\text{-}off}$	100	kHz
Output Current Noise (r. m. s.)	I_N	100	μA

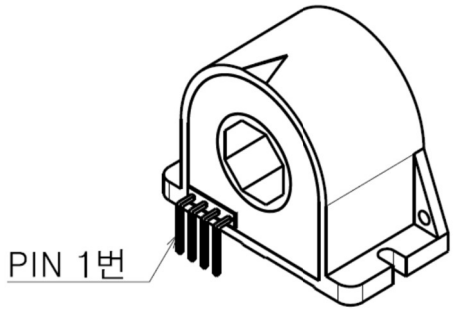
NOTES 3. Recommended load power rating : $1.5 \times R_L \times (I_{pmax}/K_N)^2$

Terminal Pin Number

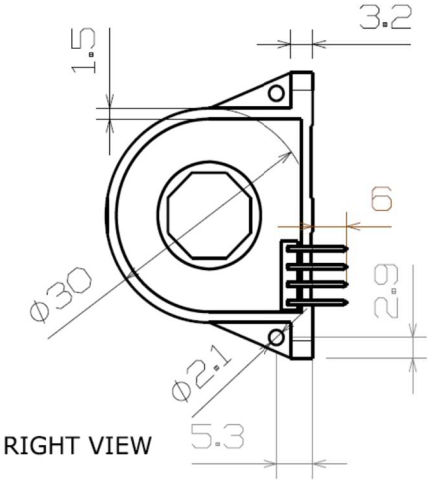
1. +15V
2. −15V
3. Output
4. GND



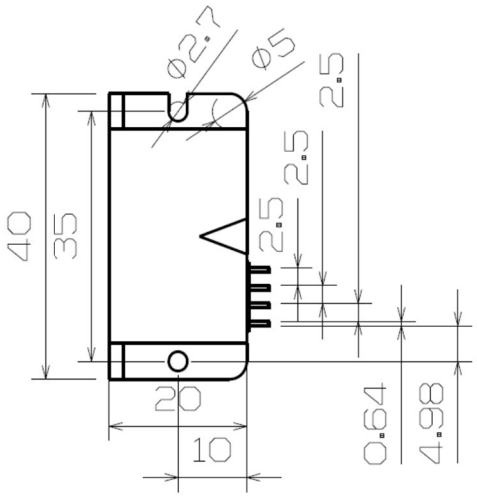
FRONT VIEW



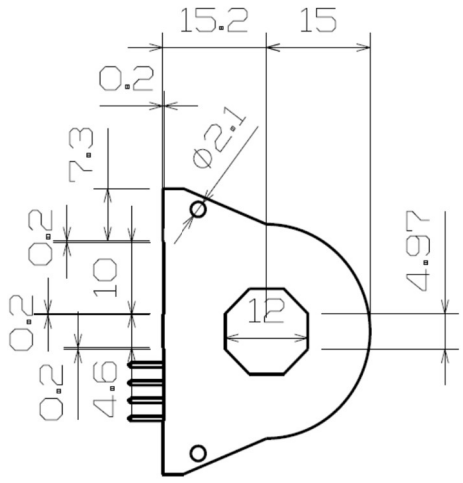
ISOMATRIC VIEW



RIGHT VIEW



TOP VIEW



LEFT VIEW

Dimensions