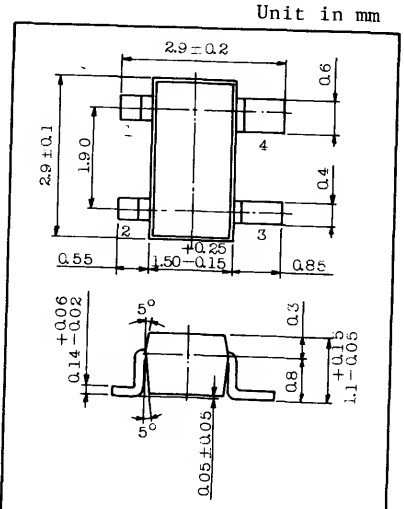
HIGH STABILITY MOTOR CONTROL.
ENERGY SAVING FOR COOLING FAN MOTOR.
DIGITAL TACHOMETER.
CRANK SHAFT POSITION SENSOR.

FEATURES:

- Excellent Temperature Characteristics.
- Wide Operating Temperature Range Capability.
  (; $-55^{o}C \sim +125^{o}C$)
- Excellent Output Voltage Linearity.
  (; up to 15k Gausses)

Unit in mm



1(+) − 3(−) I_C(INPUT)
2 − 4 V_H(OUTPUT)

JEDEC	−
EIAJ	−
TOSHIBA	10-3C1A

Weight : 0.013g

MAXIMUM RATINGS ($Ta=25^{o}C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Control Current	I_C	10	mA
Control Current (peak)	I_C	15	mA
Operating Temperature Range	Top	−55 ~ +125	^{o}C
Storage Temperature Range	Tstg	−55 ~ +150	^{o}C

ELECTRICAL CHARACTERISTICS ($Ta=25^{o}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Internal Resistance	R_d	I_C=5mA	450	-	900	Ω
Residual Voltage Ratio	V_{HO}/V_H	I_C=5mA, B=0/B=1KG	-	-	±10	%
Hall Voltage (Note 1)	V_H	I_C=5mA, B=1KG	50	80	120	mV
Temperature Coefficient (Note 2)	V_{HT}	I_C=5mA, B=5KG T1=25°C, T2=125°C	-	-	-0.06	%/°C
Linearity (Note 3)	ΔK_H	I_C=5mA, B_1=1KG, B_2=5KG	-	-	2	%

Note 1 : $V_H=V_{HM}-V_{HO}$ (V_{HM} is meter indication)

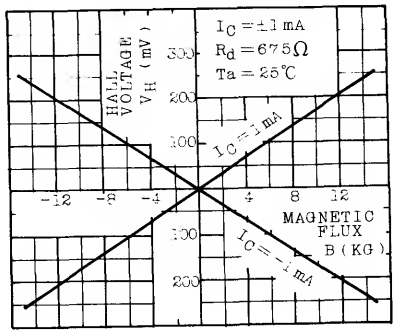
Note 2 : $V_{HT}=\frac{1}{V_H(T1)} \frac{V_H(T2)-V_H(T1)}{T2-T1} \times 100$ (%/°C)

Note 3 : $\Delta K_H=\frac{K_H(B2)-K_H(B1)}{1/2\{K_H(B1)+K_H(B2)\}} \times 100$ (%), $K_H=\frac{V_H}{I_C \cdot B}$

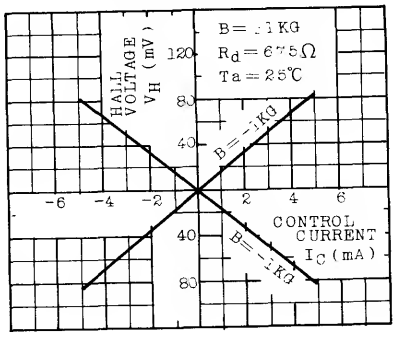
V_{HO} : Residual Voltage

K_H : Product Sensitivity

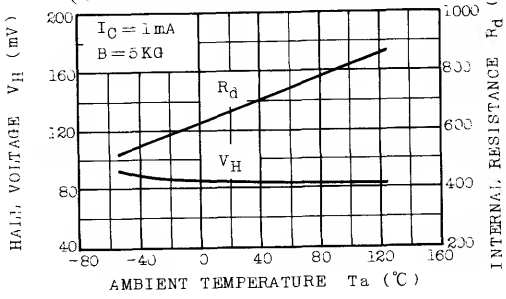
$V_H - B$ CHARACTERISTICS



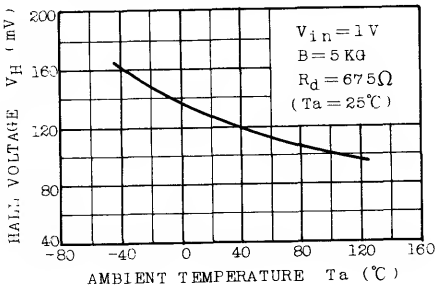
$V_H - I_C$ CHARACTERISTICS



$V_H - Ta$, $R_d - Ta$ CHARACTERISTICS
(CONSTANT CURRENT OPERATION)



$V_H - Ta$ CHARACTERISTICS
(CONSTANT VOLTAGE OPERATION)



$I_C - Ta$