

HQ-0222

Shipped in packet-tape reel(4,000pcs per reel)

Notice : It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Absolute Maximum Ratings

| Item | Symbol | Limit | Unit |
|-----------------------|--------|------------|------|
| Max. Input Voltage | V_C | 6 | V |
| Max. Input Current | I_C | 17 | mA |
| Operating Temp. Range | Topr. | -40 ~ +125 | °C |
| Storage Temp. Range | Tstg. | -40 ~ +150 | °C |

※1:パッケージ内の各個の素子毎の値です。

●Electrical Characteristics($T_a=25^\circ\text{C}$)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-------------------------------|----------------------------|---|------|------|------|----------|
| Output Hall Voltage | $V_{H(i)}$ ^{※2} | $B=50\text{mT}$, $V_C=3\text{V}$ | 90 | | 130 | mV |
| Relative Output Voltage Ratio | V_{Hr} ^{※3} | $B=50\text{mT}$, $V_C=3\text{V}$ | 95 | | 105 | % |
| Input Resistance | R_{in} | $B=0\text{mT}$, $I_C=0.1\text{mA}$ | 370 | | 570 | Ω |
| Output Resistance | $R_{out(i)}$ | $B=0\text{mT}$, $I_C=0.1\text{mA}$ | 750 | | 1150 | Ω |
| Relative Resistance Ratio | R_{outr} ^{※4} | $B=0\text{mT}$, $I_C=0.1\text{mA}$ | 95 | | 105 | % |
| Offset Voltage | $V_{OS}(V_U)$ | $B=0\text{mT}$, $V_C=3\text{V}$ | -6 | | +6 | mV |
| Temp. Coefficient of V_H | αV_H ^{※5} | $B=50\text{mT}$, $V_C=3\text{V}$ $T_a=25\sim 125^\circ\text{C}$ | | -0.2 | | %/°C |
| Temp. Coefficient of R_{in} | αR ^{※6} | $B=0\text{mT}$, $I_C=0.1\text{mA}$ $T_a=25\sim 125^\circ\text{C}$ | | -0.2 | | %/°C |

※2. $V_H = V_{HM} - V_{OS}(V_U)$ (V_{HM} :meter indication)

※3. $V_{H(i)}$ ($i=1,2$) is Hall output voltage of 2-Hall Elements of one package.

$$V_{Hr \min} = \min(V_{H(i)})/V_{H \text{avg.}} \times 100, \quad V_{Hr \max} = \max(V_{H(i)})/V_{H \text{avg.}} \times 100$$

$$\text{Where } V_{H \text{avg.}} = (V_H(1) + V_H(2))/2$$

※4. $R_{out(i)}$ ($i=1,2$) is output resistance of 2-Hall Elements of one package.

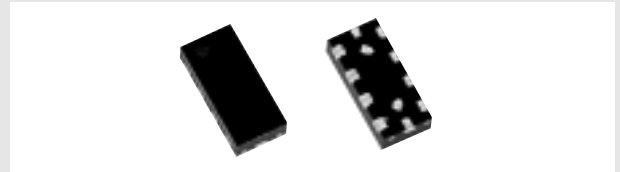
$$R_{outr \min} = \min(R_{out(i)})/R_{out \text{avg.}} \times 100, \quad R_{outr \max} = \max(R_{out(i)})/R_{out \text{avg.}} \times 100$$

$$R_{out \text{avg.}} = (R_{out(1)} + R_{out(2)})/2$$

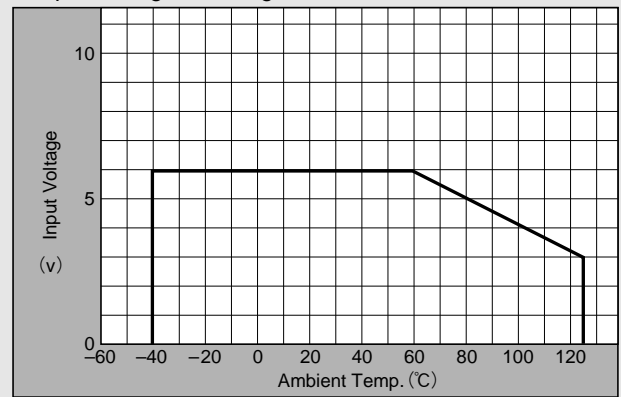
$$\text{※5. } \alpha V_H = \frac{1}{V_H(T_1)} \times \frac{V_H(T_2) - V_H(T_1)}{(T_2 - T_1)} \times 100$$

$$\text{※6. } \alpha R = \frac{1}{R(T_1)} \times \frac{R(T_2) - R(T_1)}{(T_2 - T_1)} \times 100$$

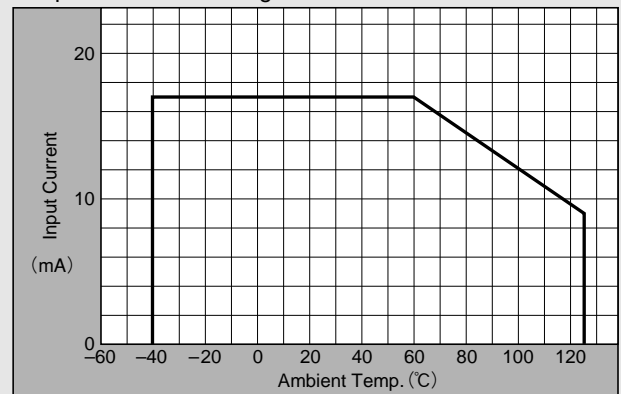
$$T_1 = 25^\circ\text{C}, \quad T_2 = 125^\circ\text{C}$$



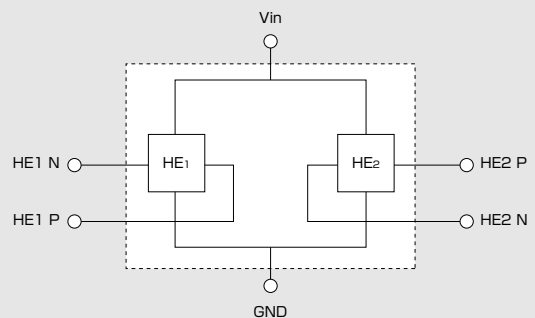
●Input Voltage Derating Curve



●Input Current Derating Curve



●Pinning



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June 2, 2010