

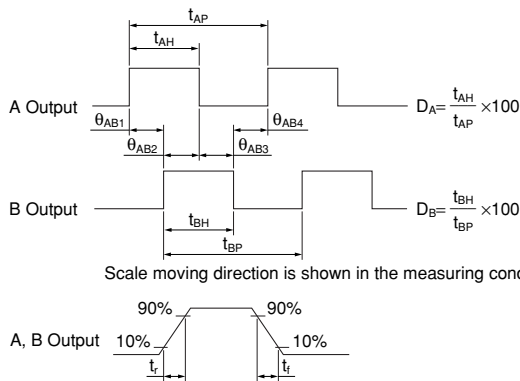
■ Electro-optical Characteristics

(T_a=25°C)

| Parameter | | Symbol | Conditions | MIN. | TYP. | MAX. | Unit |
|-----------------------------|---------------------------|--|--|----------------------|------|------|------|
| Input | Forward voltage | V _F | I _F =11mA | — | 1.3 | 1.5 | V |
| | Reverse current | I _R | V _R =1V | — | — | 100 | μA |
| Output | Operating supply voltage | V _{CC} | — | 2.7 | 5.0 | 5.5 | V |
| | Low level output voltage | V _{OL} | V _{CC} =2.7 to 5.5V, I _F =11mA, I _{OL} =8mA | — | — | 0.4 | V |
| | High level output voltage | V _{OH} | V _{CC} =2.7 to 5.5V, I _F =11mA | V _{CC} -0.3 | — | — | V |
| | Supply current | I _{CC} | V _{CC} =2.7 to 5.5V, I _F =11mA, A and B low level | — | — | 5 | mA |
| *1 Transfer characteristics | Duty ratio | D _A D _B | V _{CC} =2.7 to 5.5V, I _F =11mA, f=10kHz, Z=0.3 ^{+0.7} _{-0.2} mm | 35 | 50 | 65 | % |
| | Phase difference | θ _{AB1 to 4} | | 45 | 90 | 135 | ° |
| | Response time | t _r | | — | 1.0 | 2.0 | μs |
| | | t _f | | — | 1.0 | 2.0 | μs |
| Response frequency | f _{max} | V _{CC} =2.7 to 5.5V, I _F =11mA, Z=0.3 ^{+0.7} _{-0.2} mm | — | — | 20 | kHz | |

*1 Refer to the measuring condition. The values of transfer characteristics do not include an error of linear scale. Z is the distance between scale face and holder on the detector side.

Fig.1 Output Waveforms



Scale moving direction is shown in the measuring condition (Refer to Fig.4).

Fig.2 Forward Current vs. Ambient Temperature

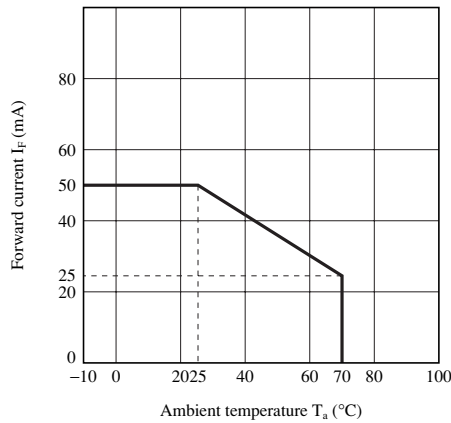
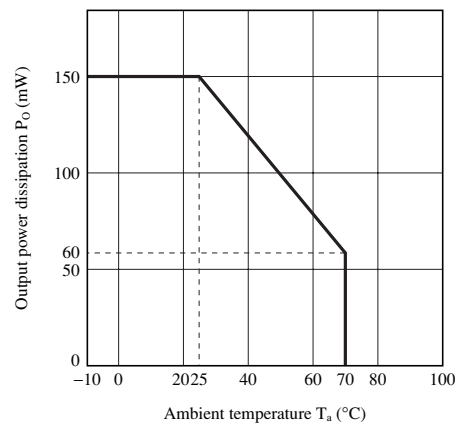


Fig.3 Output Power Dissipation vs. Ambient Temperature



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