

To: WIKIOPTICS

Mar. 22, 2021

KQC-B58641

MTTF

Regarding the MTTF of S12698, we report the MTTF calculated using the results of similar products with the same structure and the same design rules including S12698 itself.

- 1. Product Name: Si Photodiode
- 2. Type No: S12698 series

3. MTTF:

MTTF on ordinary conditions (25°C, VR=10mV) has been estimated on the basis of reliability testing (High temperature operation) performed on our Si Photodiode by Hamamatsu Photonics K.K.

After our reliability test, there was no failure part. Therefore, corresponding coefficient of 0.917(C.L60%) was used to estimate the MTTF, supposing the activation energy 0.7eV.

Sa	ample	Failures: r	Total operating time: T (Component hour)	T/r	MTTF (@25°C, VR=10mV)
2	5 pcs	0 pcs	$6.89 \times 10^6 \mathrm{hrs}$	$(6.89 \times 10^6)/0.917$	$7.5 imes 10^6 \mathrm{hrs}$

The MTTF in case of no failure depends on the total operating time and number of samples.

Please treat this result as a theoretical value for reference.

Best regards

Hamamatsu Photonics K.K.

Checked by: / / / Luly Th

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