

105°C resistance
UL VW-1 Flame-retardant cable
ECF-1000(02), ECF-1000W(02)

Feb. 1st, 2018
Asahi Kasei Corporation

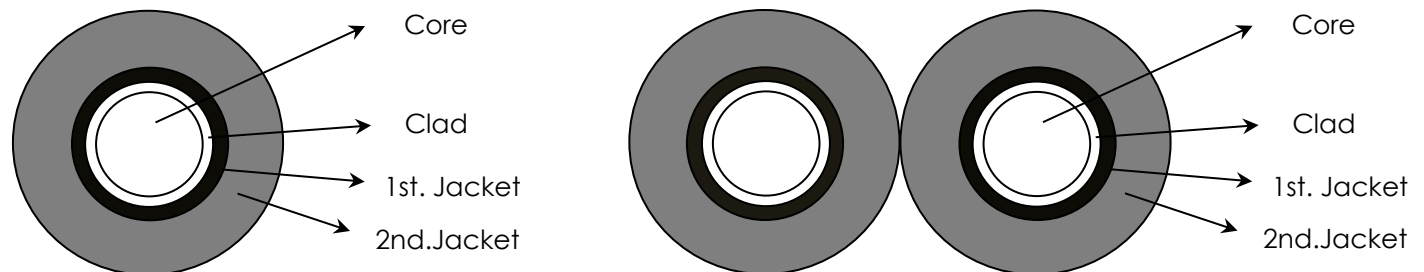
Features of ECF-1000(02), ECF-1000W(02)

- ECF-1000(02), ECF-1000W(02)
 - Flame-retardant Jacket (UL VW-1, 105°C)
 - Duplex cable is available
 - Only Asahi Kasei produces duplex 105°C resistance POF
 - Simplex ECF-1000(02)
 - Duplex ECF-1000W(02)

The first in the industry

Structure of ECF-1000(02), ECF-1000W(02) AsahiKASEI

ITEM	UNIT	Specifications
Core Material		PMMA
Clad Material		Fluorinated Polymer
Core Reflective Index		1.49
Reflective Index Profile		Step Index
Core Diameter	μm	980 ± 60
Fiber Diameter	μm	1000 ± 60
NA		0.6
1st. Jacket Material		Polyamide
1st. Jacket Diameter	μm	1300 ± 40
2nd. Jacket Material		Halogen-free Flame-retardant PE
2nd. Jacket Diameter	μm	2200 ± 70 (/ 4350 ± 200)
Jacket Color		Black
Marking (One Channel)		<i>RU AWM STYLE 5570 VW-1 105°C E116331 ASAHI KASEI</i>
Marking Color		White
Approx. Weight	g/m	4.9 / 9.8



Performance of ECF-1000(02)

ITEM	UNIT	ECF-1000(02)	SHCN-1000(E)	BH4001
Storage Temperature Range	°C	-55 ~ 105	-55 ~ 105	-55 ~ 105
Application Temperature Range	°C	-55 ~ 105	-55 ~ 105	-55 ~ 105
Operating Temperature in a Moist Atmosphere(85%RH)	°C	90	90	85(95%RH)
Attenuation (Operating Temperature)	dB/km	≤ 250	≤ 250	≤ 250
Tensile Strength at 5% Elongation	N	≥70	≥70	≥70
Tensile Strength at Break Point	N	≥ 90	≥ 150	-
Elongation at Break Point	%	≥ 90	≥ 90	-
Minimum Bending Radius	mm	15	20	15
Repeated Bending Endurance (Actual sample data)	Times	≥20,000 (40,000)	≥1,000 (60,000)	≥1,000 (11,000)
Impact Endurance	N•m	≥ 0.6	≥ 0.6	≥0.4
Flame Retardancy		UL VW-1	N/A	N/A
Duplex Cable		Available ECF-1000W(02)	N/A	N/A

Performance of ECF-1000W(02)

SCHWARTZ-ELECTRONIC VERTRIEB GMBH



MEISENWEG 8
23611 BAD SCHWARTAU

TEL.: +49 451 54444
info@s-ev.de

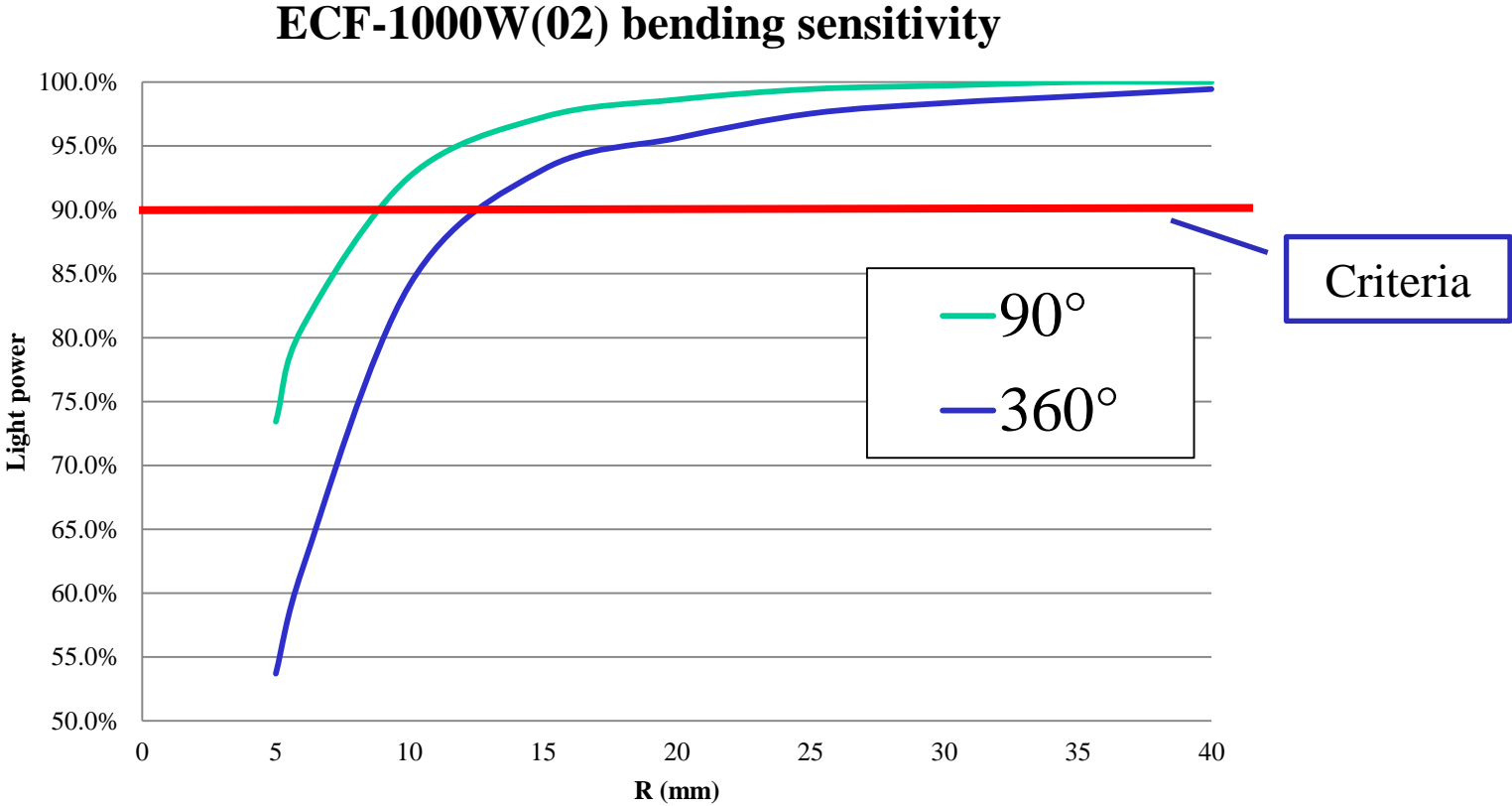
FAX: +49 451 995010
www.s-ev.de

AsahiKASEI

ITEM	UNIT	Specifications
Storage Temperature Range	°C	-55 ~ 105
Application Temperature Range	°C	-55 ~ 105
Operating Temperature in a Moist Atmosphere(85%RH)	°C	90
Attenuation (23°C 50%RH)	dB/km	≤ 200
Attenuation (Operating Temperature)	dB/km	≤ 250
Tensile Strength at 5% Elongation	N	≥80
Tensile Strength at Break Point	N	≥ 90
Elongation at Break Point	%	≥ 90
Minimum Bending Radius	mm	15
Repeated Bending Endurance	Times	≥ 20,000
Impact Endurance	N·m	≥ 0.6

Bending sensitivity of ECF-1000W(02)

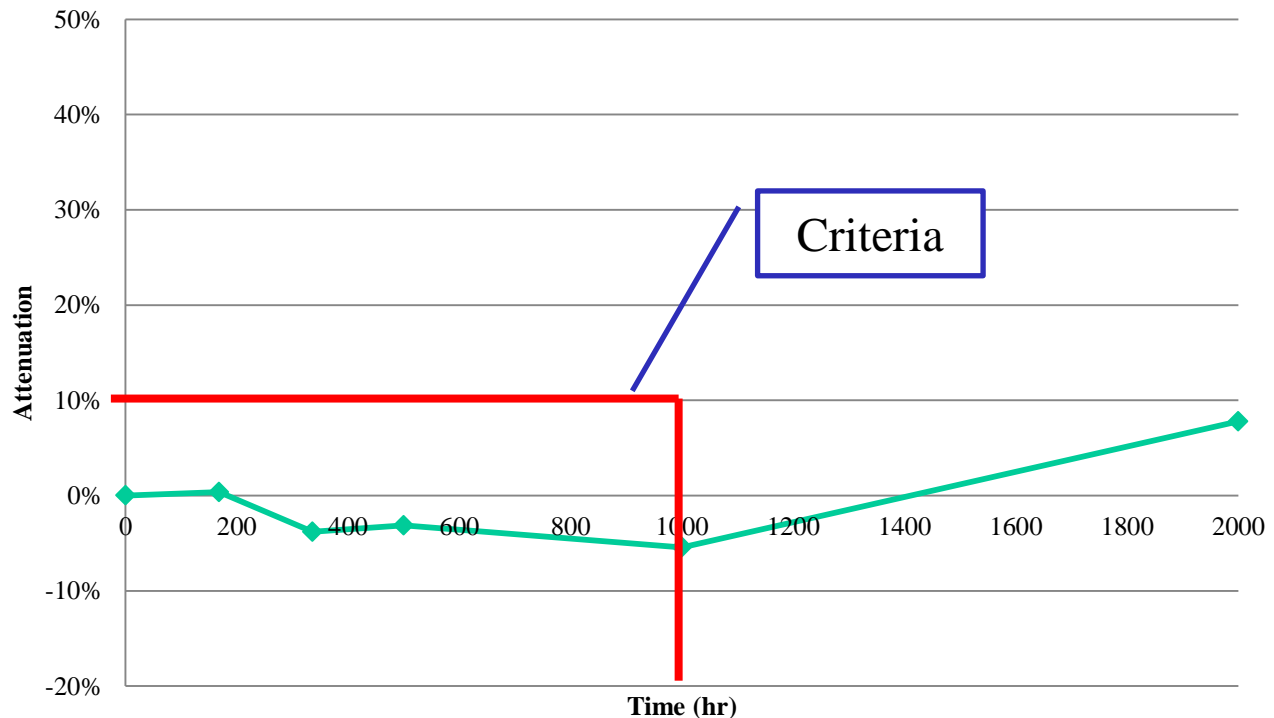
- Specification
≥ 90% @ R15mm, 90°



Reliability data of ECF-1000W(02)

- Specification
±10% @ 105°C, 1000hr

Reliability data of ECF-1000W(02) (105°C)



Reliability data of ECF-1000W(02)

- Specification
 $\pm 10\%$ @ 90°C 85%RH, 1000hr

**Reliability data of ECF-1000W(02)
(90°C 85%RH)**

