

# フォトカプラ

## 絶縁距離

### 概要

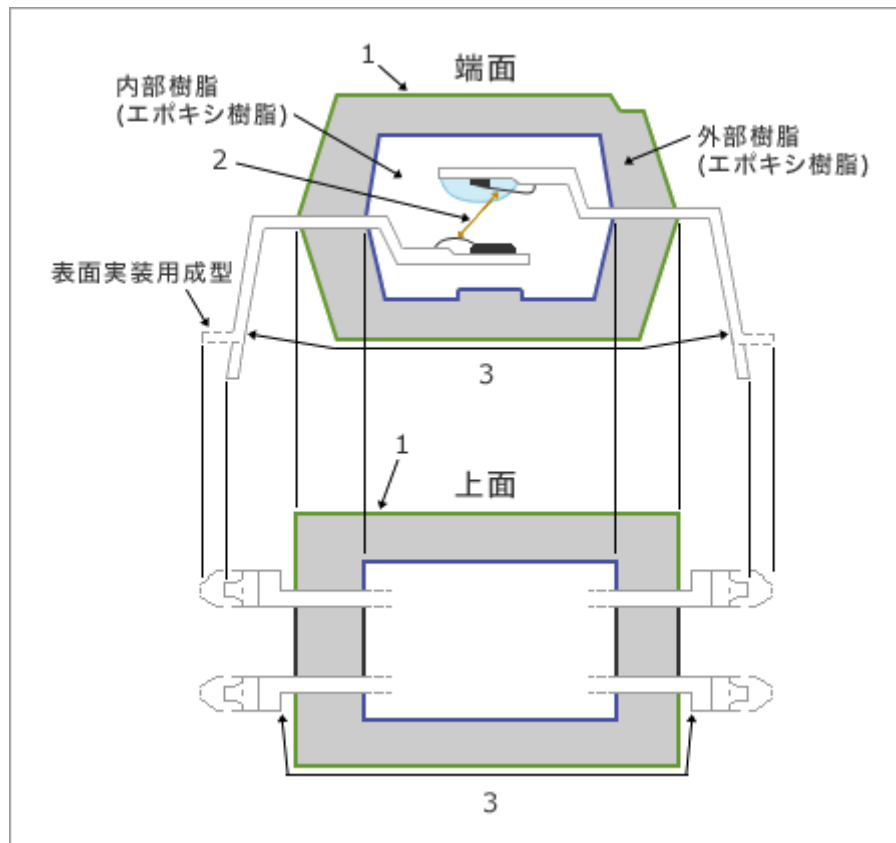
当社のフォトカプラの内部構造は、次の図のように、発光素子と受光素子との間を光透過率の高い内部樹脂で充填し、さらにその外側を遮光性の高い外部樹脂で覆った二重構造になっています。

そのため、外部からの光の影響を受けない確実な動作と、高感度（電流伝達率：CTRが大きい）とが両立しています。

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## 1. 概要

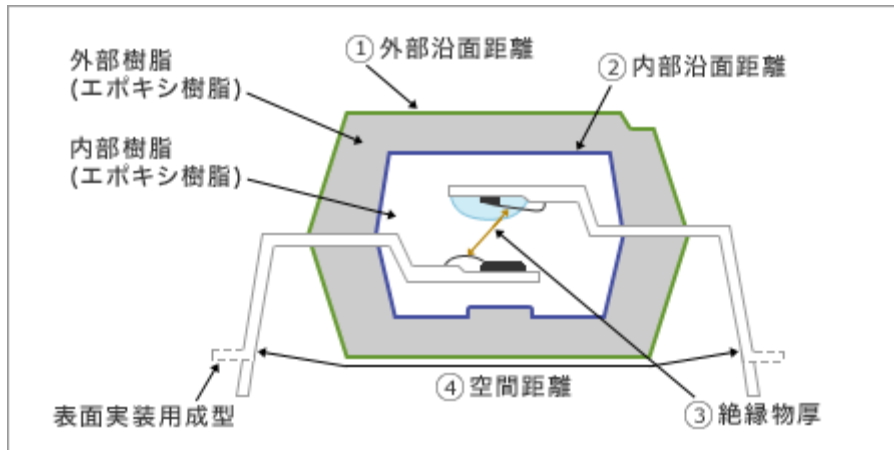


No. / 名称	意味
1. 沿面距離	パッケージ表面（図中緑色）に沿った、発光側端子と受光側端子との間の最短距離。
2. 絶縁物厚	樹脂で絶縁された発光側と受光側との間の最短距離。
3. 空間距離	樹脂外部の空間で、発光側端子と受光側端子との間が最短となる距離。端子形状により、外部沿面距離と等しくなる場合もある。

パッケージ名称	端子方向 モールド幅 (mm)	Length (mm) 長さ (mm)	Height (mm) 高さ (mm)	質量 (g)
16-pin DIP	6.5	19.8	3.6	1.02
8-pin DIP	6.5	9.25	3.6	0.55
4-pin DIP	6.5	4.6	3.6	0.26
6-pin SDIP	6.8	4.58	3.7	0.35
8-pin SDIP	6.8	5.85	3.7	0.35
16-pin SSOP	4.4	10.3	2	0.2
12-pin SSOP	4.4	5.6	2.5	0.14
8-pin SSOP	3.95	5.21	3.27	0.14
5-pin LSSO5	7.5	2.5	2.1	0.075
5-pin SOP	4.4	4	2.1	0.08
4-pin SOP	4.4	4	2.1	0.08
4-pin LSSOP	7.5	2.5	2.1	0.075
4-pin SSOP	4.4	2.7	2	0.05
4-pin mini flat-lead	4.6	2.5	2.1	0.05

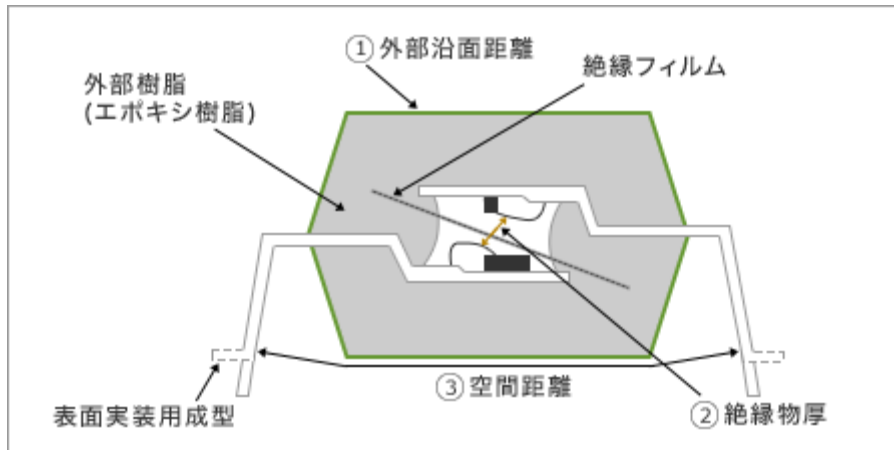
※注意：上記数値は、リードフォーミングの違いなどで、若干の差異があります。

## 2. 16-pin DIP (Dual Inline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2501-4, PS2501L-4	5.0	7.0	3.5	0.3	7.0
PS2502-4, PS2502L-4	5.0	7.0	3.5	0.3	7.0
PS2505-4, PS2505L-4	5.0	7.0	3.5	0.3	7.0

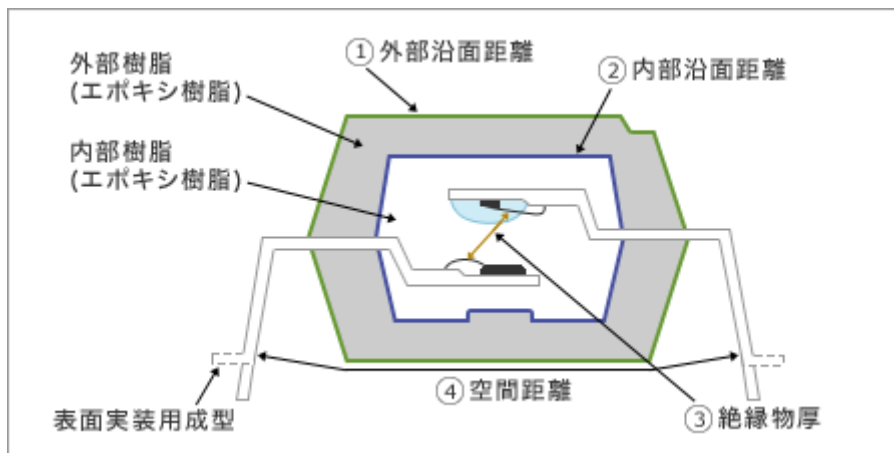
### 3. 8-pin DIP (Dual Inline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
PS8501, PS8501L3	5.0	7.0	0.4	7.0
PS8501L1, PS8501L2	5.0	8.0	0.4	8.0
PS8502, PS8502L3	5.0	7.0	0.4	7.0
PS8502L1, PS8502L2	5.0	8.0	0.4	8.0
PS9505, PS9505L3	5.0	7.0	0.4	7.0
PS9505L1, PS9505L2	5.0	8.0	0.4	8.0
PS9513, PS9513L3	5.0	7.0	0.4	7.0
PS9513L1, PS9513L2	5.0	8.0	0.4	8.0
PS9587, PS9587L3	5.0	7.0	0.4	7.0
PS9587L1, PS9587L2	5.0	8.0	0.4	8.0

## 4. 4-pin DIP (Dual Inline Package)

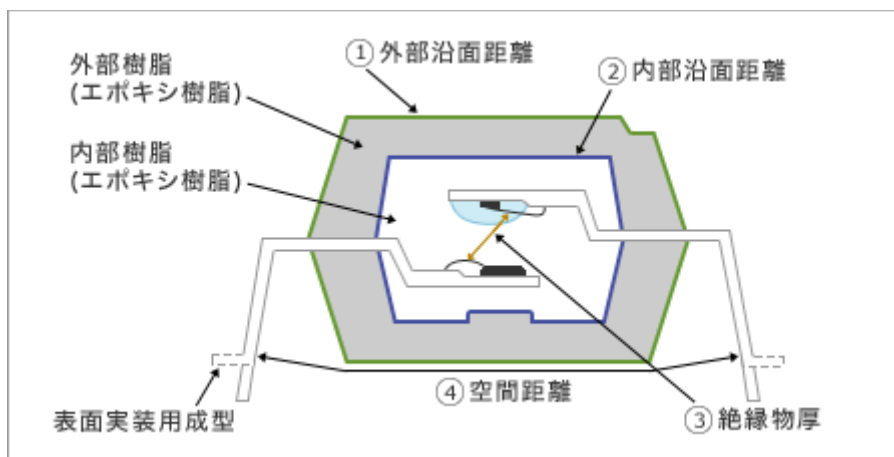
### 4.1 ストレート、表面実装用(L)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2501-1, PS2501L-1	5.0	7.0	3.5	0.3	7.0
PS2501A-1, PS2501AL-1	5.0	7.0	3.5	0.3	7.0
PS2502-1, PS2502L-1	5.0	7.0	3.5	0.3	7.0
PS2503-1, PS2503L-1	5.0	7.0	3.5	0.3	7.0
PS2505-1, PS2505L-1	5.0	7.0	3.5	0.3	7.0
PS2506-1, PS2506L-1	5.0	7.0	3.5	0.3	7.0
PS2513-1, PS2513L-1	5.0	7.0	3.5	0.3	7.0
PS2514-1, PS2514L-1	5.0	7.0	3.5	0.3	7.0
PS2533-1, PS2533L-1	5.0	7.0	3.5	0.3	7.0
PS2535-1, PS2535L-1	5.0	7.0	3.5	0.3	7.0
PS2561-1, PS2561L-1	5.0	7.0	3.5	0.3	7.0
PS2561A-1, PS2561AL-1	5.0	7.0	3.5	0.3	7.0
PS2561B-1, PS2561BL-1	5.0	7.0	3.5	0.3	7.0
PS2561D-1, PS2561DL-1	5.0	7.0	3.5	0.3	7.0

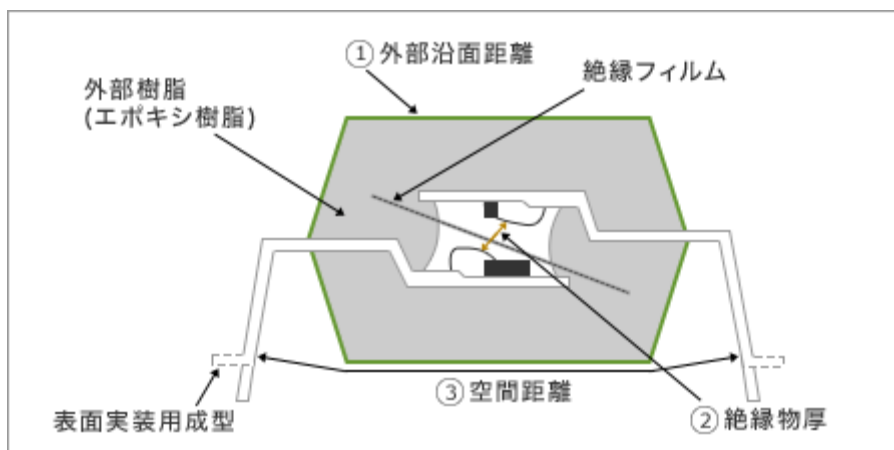
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2561F-1, PS2561FL-1	5.0	7.0	3.5	0.3	7.0
PS2562-1, PS2562L-1	5.0	7.0	3.5	0.3	7.0
PS2565-1, PS2565L-1	5.0	7.0	3.5	0.3	7.0

## 4.2 長沿面用(L1)、長沿面表面実装用(L2)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2561L1-1, PS2561L2-1	5.0	7.0	4.0	0.4	7.0
PS2561AL1-1, PS2561AL2-1	5.0	7.0	4.0	0.4	7.0
PS2561BL1-1, PS2561BL2-1	5.0	7.0	4.0	0.4	7.0
PS2561DL1-1, PS2561DL2-1	5.0	8.0	4.0	0.4	8.0
PS2562L1-1, PS2562L2-1	5.0	7.0	4.0	0.4	7.0
PS2565L1-1, PS2565L2-1	5.0	7.0	4.0	0.4	7.0
PS2581L1, PS2581L2	5.0	8.0	4.0	0.4	8.0
PS2581AL1, PS2581AL2	5.0	8.0	4.0	0.4	8.0

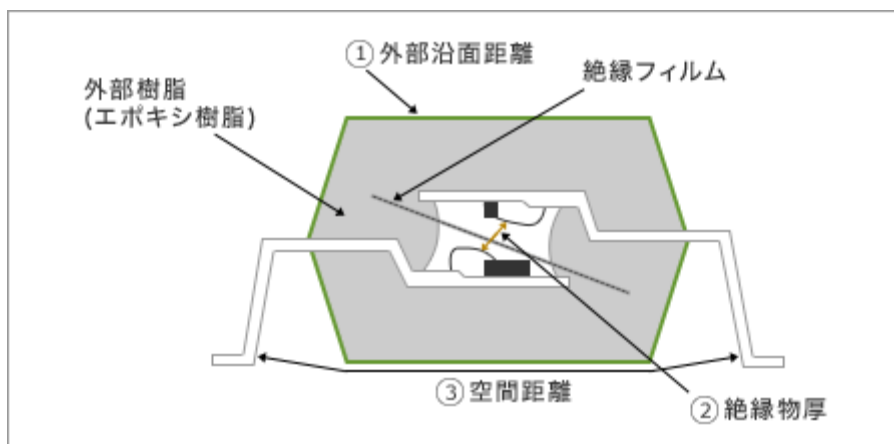
## 5. 6-pin SDIP (Shrink Dual Inline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
PS8302L	5.0	7.0	0.4	7.0
PS8302L2	5.0	8.0	0.4	8.0
PS9303L	5.0	7.0	0.4	7.0
PS9303L2	5.0	8.0	0.4	8.0
PS9306L	5.0	7.0	0.4	7.0
PS9306L2	5.0	8.0	0.4	8.0
PS9307L	5.0	7.0	0.4	7.0
PS9307L2	5.0	8.0	0.4	8.0
PS9308L	5.0	7.0	0.4	7.0
PS9308L2	5.0	8.0	0.4	8.0
PS9313L	5.0	7.0	0.4	7.0
PS9313L2	5.0	8.0	0.4	8.0
PS9317L	5.0	7.0	0.4	7.0
PS9317L2	5.0	8.0	0.4	8.0
PS9324L	5.0	7.0	0.4	7.0
PS9324L2	5.0	8.0	0.4	8.0
PS9331L	5.0	7.0	0.4	7.0
PS9331L2	5.0	8.0	0.4	8.0
PS9351L	5.0	7.0	0.4	7.0
PS9351L2	5.0	8.0	0.4	8.0

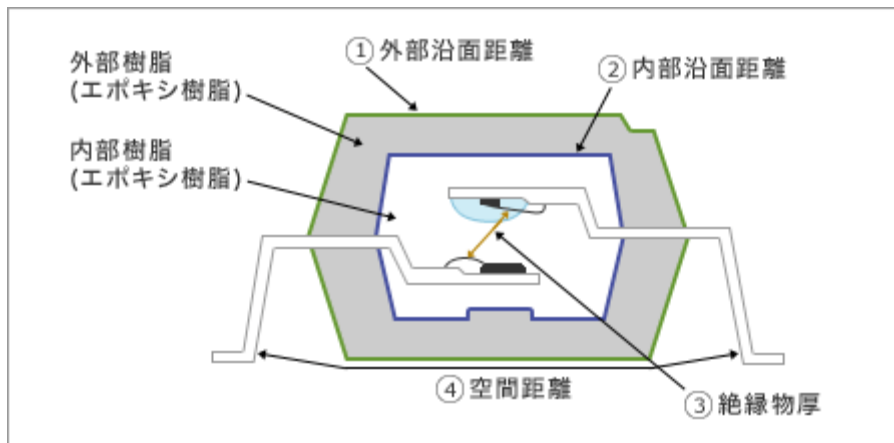


## 6. 8-pin SDIP (Shrink Dual Inline Package)



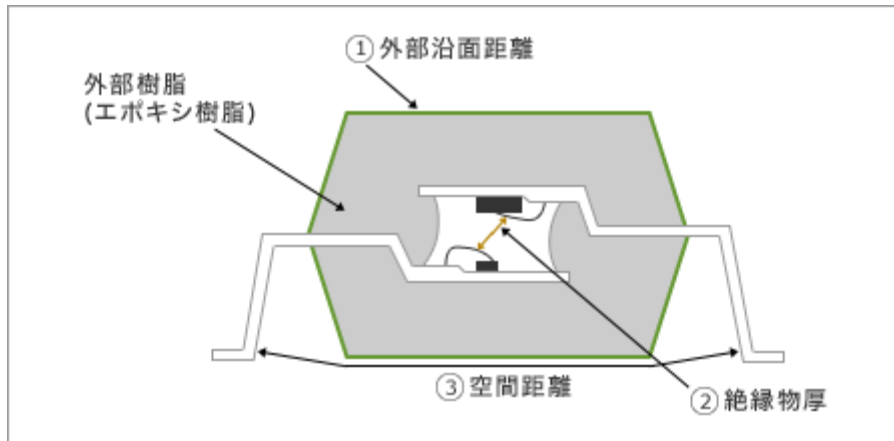
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
PS9305L	5.0	8.0	0.4	7.0
PS9305L2	5.0	8.0	0.4	8.0
PS9332L	5.0	7.0	0.4	7.0
PS9332L2	5.0	8.0	0.4	8.0

## 7. 16-pin SSOP (Shrink Small Outline Package)



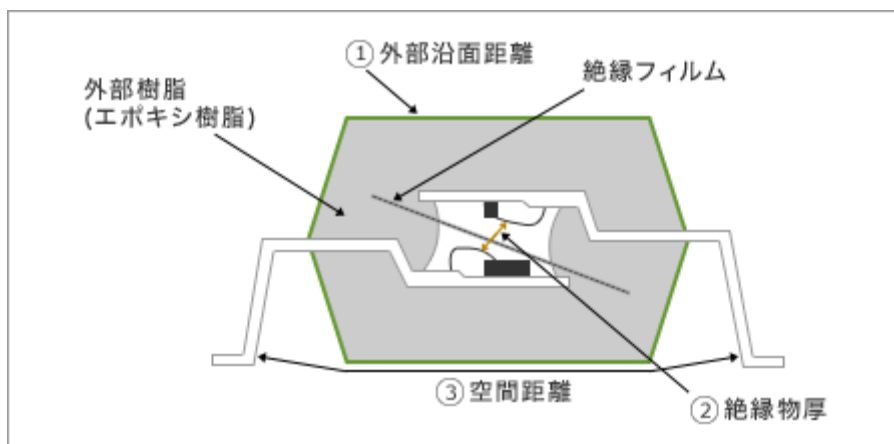
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2801C-4	2.5	4.5	2.5	0.1	4.5
PS2802-4	2.5	4.5	2.5	0.1	4.5
PS2805C-4	2.5	4.5	2.5	0.1	4.5
PS2811-4	2.5	4.5	2.5	0.1	4.5
PS2815-4	2.5	4.5	2.5	0.1	4.5
PS2833-4	2.5	4.5	2.5	0.1	4.5

## 8. 12-pin SSOP (Shrink Small Outline Package)



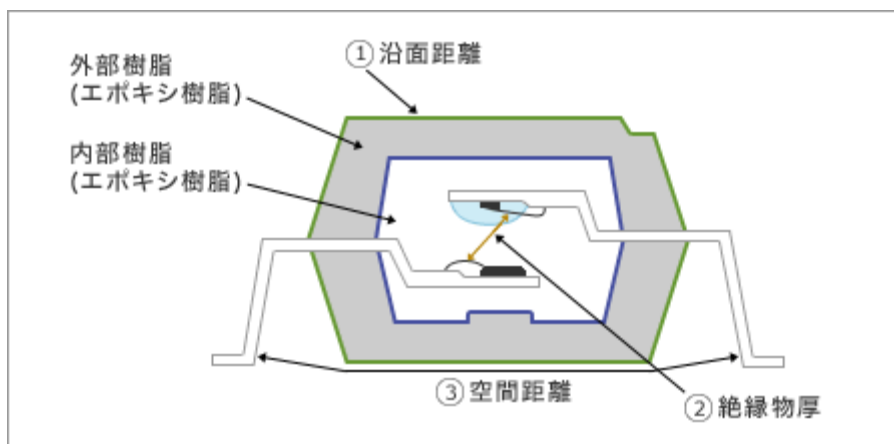
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
PS2841-4A	1.5	4.0	0.4	4.0
PS2841-4B	1.5	4.0	0.4	4.0
PS2845-4A	1.5	4.0	0.4	4.0

## 9. 8-pin SSOP (Shrink Small Outline Package)



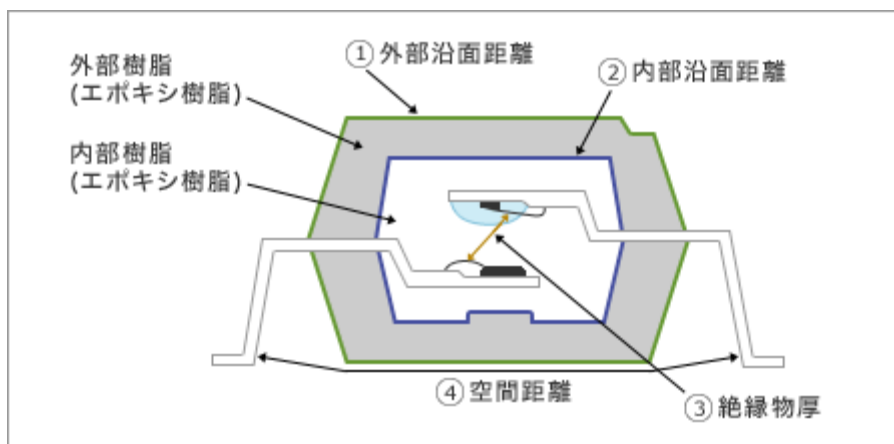
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
PS8802-1, PS8802-2	2.5	4.0	0.2	4.0
PS8821-1, PS8821-2	2.5	4.0	0.2	4.0
PS9817A-1, PS9817A-2	2.5	4.0	0.2	4.0
PS9821-1, PS9821-2	2.5	4.0	0.2	4.0
PS9822-1, PS9822-2	2.5	4.0	0.2	4.0
PS9851-1, PS9851-2	2.5	4.0	0.2	4.0

## 10. 5-pin LSSO5 (Long Creepage Shrink Small Outline Package)



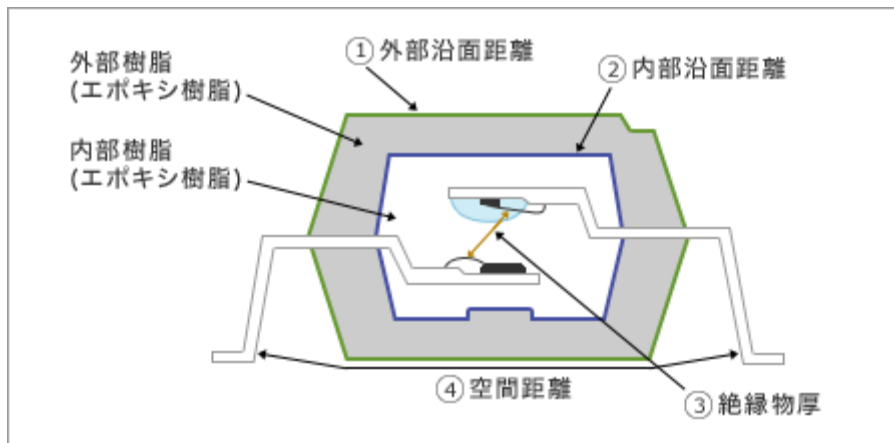
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
RV1S9213A	5.0	8.2	0.15	8.2
RV1S9260A	5.0	8.2	0.15	8.2

## 11. 5-pin SOP (Small Outline Package)



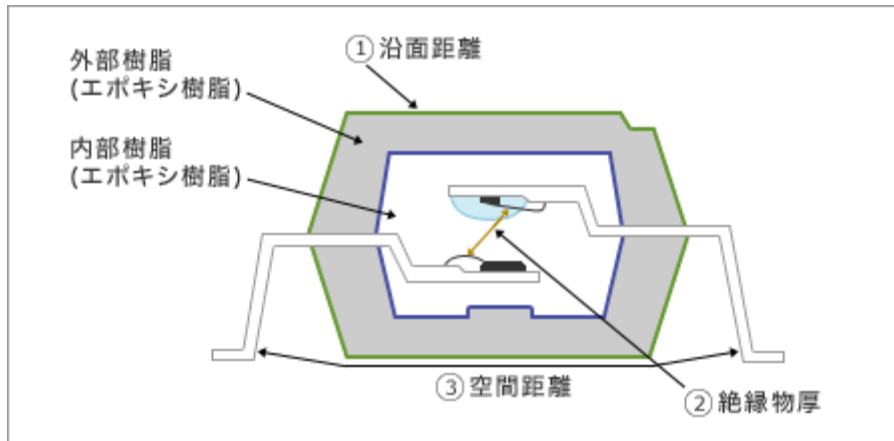
品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS8101	3.75	4.2	2.5	0.2	4.2
PS9113	3.75	4.2	2.5	0.2	4.2
PS9117A	3.75	4.2	2.5	0.2	4.2
PS9121	3.75	4.2	2.5	0.2	4.2
PS9122	3.75	4.2	2.5	0.2	4.2
PS9123	3.75	4.2	2.5	0.2	4.2
PS9124	3.75	4.2	2.5	0.2	4.2
PS9151	3.75	4.2	2.5	0.2	4.2

## 12. 4-pin SOP (Small Outline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2381-1	5.0	8.0	-	0.4	8.0
PS2701A-1	3.75	5.0	2.5	0.3	5.0
PS2702-1	3.75	5.0	2.5	0.3	5.0
PS2703-1	3.75	5.0	2.5	0.3	5.0
PS2705A-1	3.75	5.0	2.5	0.3	5.0
PS2711-1	3.75	5.0	2.5	0.3	5.0
PS2715-1	3.75	5.0	2.5	0.3	5.0
PS2733-1	2.5	5.0	2.5	0.3	5.0
PS2761B-1	3.75	5.0	-	0.4	5.0

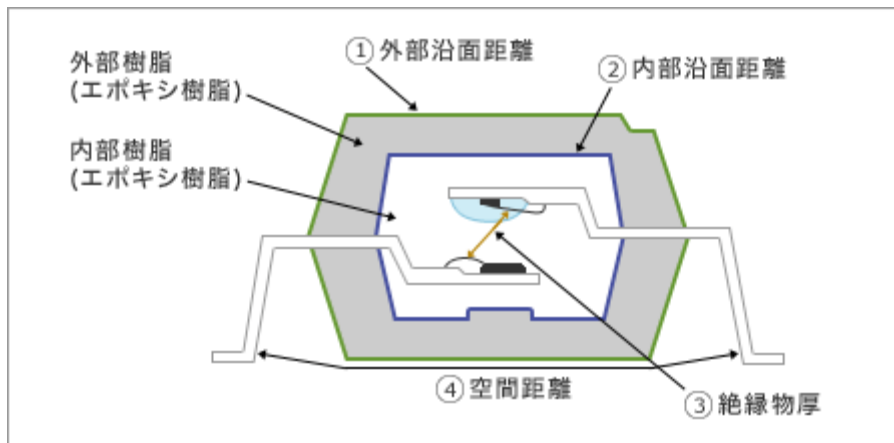
### 13. 4-pin LSSOP (Long Creepage Shrink Small Outline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 絶縁物厚 (mm)	3. 空間距離 (mm)
RV1S2211A	5.0	8.2	0.15	8.2
RV1S2281A	5.0	8.2	0.15	8.2
RV1S2285A	5.0	8.2	0.15	8.2

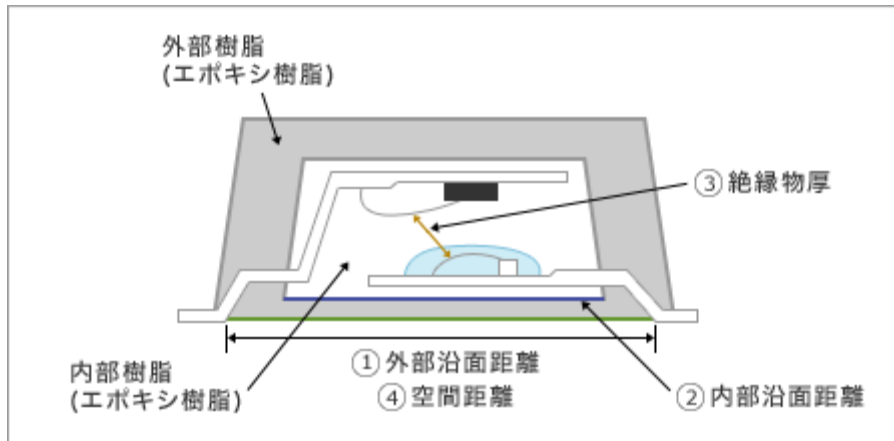


## 14. 4-pin SSOP (Shrink Small Outline Package)



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2801C-1	2.5	4.5	2.5	0.1	4.5
PS2802-1	2.5	4.5	2.5	0.1	4.5
PS2805C-1	2.5	4.5	2.5	0.1	4.5
PS2811-1	2.5	4.5	2.5	0.1	4.5
PS2815-1	2.5	4.5	2.5	0.1	4.5
PS2833-1	2.5	4.5	2.5	0.1	4.5
PS2861B-1	3.75	5.0	-	0.4	5.0

## 15. 4-pin Mini Flat-lead



品名	絶縁耐圧 (kVr.m.s.)	1. 外部沿面距離 (mm)	2. 内部沿面距離 (mm)	3. 絶縁物厚 (mm)	4. 空間距離 (mm)
PS2911-1	2.5	4.0	2.5	0.4	4.0
PS2913-1	2.5	4.0	2.5	0.4	4.0
PS2915-1	2.5	4.0	2.5	0.4	4.0
PS2933-1	2.5	4.0	2.5	0.4	4.0

## 16. Revision History

Revision	Date	Description
1.0	Oct.23.20	Initial release.

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