

| То | DigiKey |
|---------|-------------------------------------------------------------------------------------------|
| From | Samsung Electro-Mechanics CO., LTD. Component Solution (Biz Unit) Quality Innovation Team |
| Subject | Part Number Change |
| Date | June 17, 2019 |

Dear customer,

We would like to supply Multi-Layer Ceramic Capacitor with changed Part Number as shown below.

Details -----

| PCN No. | QC BF-07-1 | | PCN Rate | С |
|-------------|----------------------------------------------------------------------------------|----------------------------------------|-------------------|------------------------------------|
| Products | CL21A226MAQNFN | | | |
| | Increasing the chip size significantly improves the reliability characteristics, | | | |
| Durnaga | (High Temperature R | esistance : With 100% \rightarrow 15 | 0% of rated volta | ge) |
| Purpose | and Chip Size is diffe | erent from competitors, there a | are some compan | ies that require standardization. |
| | So progress PCN of | corresponding models | | |
| Planned | | | | |
| delivery | - If no disapproval for SAMSUNG planed schedule from customer | | | |
| schedule | : 2019.12.1 ~ | | | |
| for change | - If required from customers for schedule change | | | |
| applied | : Adjust the schedule by discussion with customer | | | |
| products | | | | |
| | Before Change After Change | | | |
| | | | | |
| Detailed | EPN | Current MPN | EPN | Current MPN |
| information | /// | CL21A226MAQNFN | | CL21A226MAYNFN |
| for change | | L : 2.0+/- <mark>0.15mm</mark> | | L : 2.0+/- <mark>0.20mm</mark> |
| | Size Tolerance | W : 1.25+/- <mark>0.15mm</mark> | Size Tolerance | ce W : 1.25+/- <mark>0.20mm</mark> |
| | | T : 1.25+/- <mark>0.15</mark> mm | | T : 1.25+/- <mark>0.2mm</mark> |
| | | | | |

| | Please, reply us the information mentioned below. | | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | Planned delivery schedule Accept SAMSUNG plan : Yes (), No () for change applied products If not accept SAMSUNG plan, Customer's required schedule (to supply from MM, DD) | | |
| | - Required Sample for test : Yes()+ Quantity(pcs) No() | | |
| | If you have any question or requirement regarding this PCN, please feel free to contact us. | | |
| Reply from customers | Sales : Person in charge of each account Quality : Seung-Jin Hong (Senior Engineer, SEMCO Component Quality Innovation Team) [seungjin.hong@samsung.com] Jong-Tae Ryu (Senior Engineer, SEMCO Component Quality Innovation Team) [willows78.ryu@samsung.com] In case that there is no reply from you regarding this PCN within 1 month, it would be considered that you agree this change and we will supply the products according to SAMSUNG plan. | | |
| | Customer / Company : | | |

M



PCN

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| From | Samsung Electro-Mechanics CO., LTD. Component Solution (Biz Unit) Quality Innovation Team |
| Subject | Part Number Change |
| Date | June 17, 2019 |

Dear customer,

We would like to supply Multi-Layer Ceramic Capacitor with changed Part Number as shown below.

Details -----

| | | | 1 | | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------|------------------------------------------------------------|--|
| PCN No. | QC BF-07-2 | | PCN Rate | С | |
| Products | CL21A226MAQNNN | | | | |
| | Increasing the chip size significantly improves the reliability characteristics, | | | | |
| _ | (High Temperature R | esistance : With 100% \rightarrow 15 | 0% of rated volta | ige) | |
| Purpose | and Chip Size is diffe | erent from competitors, there a | are some compar | nies that require standardization. | |
| | So progress PCN of | corresponding models | | | |
| Planned | | | | | |
| delivery | - If no disapproval for SAMSUNG planed schedule from customer | | | | |
| schedule | : 2019.12.1 ~ | | | | |
| for change | - If required from customers for schedule change | | | | |
| applied | : Adjust the schedule by discussion with customer | | | | |
| products | | | | | |
| | | | | | |
| | Beto | ore Change | | After Change | |
| Detailed | EPN | Current MPN | EPN | Current MPN | |
| information | /// | CL21A226MAQNNN | /// | CL21A226MAYNNN | |
| for change | | L : 2.0+/- <mark>0.15mm</mark> | | L : 2.0+/-0.20mm | |
| | Size Tolerance | W : 1.25+/- <mark>0.15mm</mark> | Size Toleran | ce W : 1.25+/- <mark>0.20mm</mark> | |
| | | T : 1.25+/- <mark>0.15</mark> mm | | T : 1.25+/- <mark>0.2mm</mark> | |
| for change applied products Detailed information | : 2019.12.1 ~ - If required from customers for schedule change : Adjust the schedule by discussion with custor Before Change | | EPN /// | CL21A226MAYNNN L : 2.0+/-0.20mm Ce W : 1.25+/-0.20mm | |

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| | - Required Sample for test : Yes()+ Quantity(pcs) No() | | | |
| | If you have any question or requirement regarding this PCN, please feel free to contact us. | | | |
| Reply from customers | Sales : Person in charge of each account Quality : Seung-Jin Hong (Senior Engineer, SEMCO Component Quality Innovation Team) [seungjin.hong@samsung.com] Jong-Tae Ryu (Senior Engineer, SEMCO Component Quality Innovation Team) [willows78.ryu@samsung.com] • In case that there is no reply from you regarding this PCN within 1 month, it would be considered | | | |
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| From | Samsung Electro-Mechanics CO., LTD. Component Solution (Biz Unit) Quality Innovation Team |
| Subject | Part Number Change |
| Date | June 17, 2019 |

Dear customer,

We would like to supply Multi-Layer Ceramic Capacitor with changed Part Number as shown below.

Details -----

| PCN No. | QC BF-07-3 | | PCN Rate | С |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|--------------------------------------|
| Products | CL21A226MAQNNP | | | |
| Purpose | Increasing the chip size significantly improves the reliability characteristics, (High Temperature Resistance : With 100% → 150% of rated voltage) and Chip Size is different from competitors, there are some companies that require standardization. So progress PCN of corresponding models | | | |
| Planned | | | | |
| delivery | - If no disapproval fo | r SAMSUNG planed schedule | e from custome | r |
| schedule | : 2019.12.1 ~ | | | |
| for change | - If required from customers for schedule change | | | |
| applied | : Adjust the schedule by discussion with customer | | | |
| products | | | | |
| | Bef | ore Change | | After Change |
| Detailed | EPN | Current MPN | EPN | Current MPN |
| information | /// | CL21A226MAQNNP | /// | CL21A226MAYNNP |
| for change | | L : 2.0+/-0.15mm | | L : 2.0+/-0.20mm |
| | Size Tolerance | W : 1.25+/-0.15mm | Size Toler | ance W : 1.25+/- <mark>0.20mm</mark> |
| | | T : 1.25+/- <mark>0.15mm</mark> | | T : 1.25+/ <mark>-0.2mm</mark> |

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| | Planned delivery schedule Accept SAMSUNG plan : Yes (), No () for change applied products If not accept SAMSUNG plan, Customer's required schedule (to supply from MM, DD) | | | |
| | - Required Sample for test : Yes()+ Quantity(pcs) No() | | | |
| | If you have any question or requirement regarding this PCN, please feel free to contact us. | | | |
| Reply from customers | Sales : Person in charge of each account Quality : Seung-Jin Hong (Senior Engineer, SEMCO Component Quality Innovation Team) [seungjin.hong@samsung.com] Jong-Tae Ryu (Senior Engineer, SEMCO Component Quality Innovation Team) [willows78.ryu@samsung.com] In case that there is no reply from you regarding this PCN within 1 month, it would be considered that you agree this change and we will supply the products according to SAMSUNG plan. | | | |
| | Customer / Company : | | | |

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| From | Samsung Electro-Mechanics CO., LTD. Component Solution (Biz Unit) Quality Innovation Team |
| Subject | Part Number Change |
| Date | June 17, 2019 |

Dear customer,

We would like to supply Multi-Layer Ceramic Capacitor with changed Part Number as shown below.

Details -----

| PCN No. | QC BF-07-4 | | PCN Rate | С | |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------|--------------------------------|--|
| Products | CL21A226MAQNNW | | | | |
| Purpose | Increasing the chip size significantly improves the reliability characteristics, (High Temperature Resistance : With 100% → 150% of rated voltage) and Chip Size is different from competitors, there are some companies that require standardization. So progress PCN of corresponding models | | | | |
| Planned | | | | | |
| delivery | - If no disapproval fo | - If no disapproval for SAMSUNG planed schedule from customer | | | |
| schedule | : 2019.12.1 ~ | | | | |
| for change | - If required from customers for schedule change | | | | |
| applied | : Adjust the schedule by discussion with customer | | | | |
| products | | | | | |
| | Before Change | | | After Change | |
| Detailed | EPN | Current MPN | EPN | Current MPN | |
| information | /// | CL21A226MAQNNW | /// | CL21A226MAYNNW | |
| for change | | L : 2.0+/-0.15mm | | L : 2.0+/-0.20mm | |
| | Size Tolerance | W : 1.25+/ <mark>-0.15</mark> mm | Size Toler | ance W : 1.25+/-0.20mm | |
| | | T : 1.25+/- <mark>0.15mm</mark> | | T : 1.25+/- <mark>0.2mm</mark> | |

| | Please, reply us the information mentioned below. | | | |
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| | Planned delivery schedule Accept SAMSUNG plan : Yes (), No () for change applied products If not accept SAMSUNG plan, Customer's required schedule (to supply from MM, DD) | | | |
| | - Required Sample for test : Yes()+ Quantity(pcs) No() | | | |
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| Reply from customers | Sales : Person in charge of each account Quality : Seung-Jin Hong (Senior Engineer, SEMCO Component Quality Innovation Team) [seungjin.hong@samsung.com] | | | |
| | Jong-Tae Ryu (Senior Engineer, SEMCO Component Quality Innovation Team) [willows78.ryu@samsung.com] | | | |
| | In case that there is no reply from you regarding this PCN within 1 month, it would be considered that you agree this change and we will supply the products according to SAMSUNG plan. | | | |
| | Customer / Company : | | | |
| | Team : | | | |
| | Name / Position : (signature) | | | |

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| Subject | Part Number Change |
| Date | June 17, 2019 |

Dear customer,

We would like to supply Multi-Layer Ceramic Capacitor with changed Part Number as shown below.

Details -----

| QC BF-07-5 | | PCN Rate | С | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| CL21A226MAQNNX | | | | | |
| Increasing the chip size significantly improves the reliability characteristics, (High Temperature Resistance : With 100% → 150% of rated voltage) and Chip Size is different from competitors, there are some companies that require standardization. So progress PCN of corresponding models | | | | | |
| | | | | | |
| - If no disapproval for SAMSUNG planed schedule from customer | | | | | |
| : 2019.12.1 ~ | | | | | |
| - If required from customers for schedule change | | | | | |
| : Adjust the schedule by discussion with customer | | | | | |
| | | | | | |
| Before Change | | | After Change | | |
| EPN | Current MPN | EPN | Current MPN | | |
| /// | CL21A226MAQNNX | /// | CL21A226MAYNNX | | |
| Size Tolerance | L : 2.0+/-0.15mm W : 1.25+/-0.15mm T : 1.25+/-0.15mm | Size Tolera | L : 2.0+/-0.20mm ance W : 1.25+/-0.20mm T : 1.25+/-0.2mm | | |
| | CL21A226MAQNNX Increasing the chip s (High Temperature R and Chip Size is diffe So progress PCN of - If no disapproval for : 2019.12.1 ~ - If required from cus : Adjust the scheet Befor /// | CL21A226MAQNNX Increasing the chip size significantly improves the (High Temperature Resistance : With 100% \rightarrow 15 and Chip Size is different from competitors, there a So progress PCN of corresponding models - If no disapproval for SAMSUNG planed schedule : 2019.12.1 ~ - If required from customers for schedule change : Adjust the schedule by discussion with custo Before Change EPN Current MPN /// CL21A226MAQNNX L : 2.0+/-0.15mm | CL21A226MAQNNX Increasing the chip size significantly improves the reliability charaer (High Temperature Resistance : With 100% → 150% of rated vol and Chip Size is different from competitors, there are some composed progress PCN of corresponding models - If no disapproval for SAMSUNG planed schedule from customer : 2019.12.1 ~ - If required from customers for schedule change : Adjust the schedule by discussion with customer Before Change EPN Current MPN /// CL21A226MAQNNX /// L : 2.0+/-0.15mm Size Tolerance W : 1.25+/-0.15mm | | |

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| | - Required Sample for test : Yes()+ Quantity(pcs) No() | | | | |
| | If you have any question or requirement regarding this PCN, please feel free to contact us. | | | | |
| | Sales : Person in charge of each account Quality : Seung-Jin Hong (Senior Engineer, SEMCO Component Quality Innovation Team) [seungjin.hong@samsung.com] Jong-Tae Ryu (Senior Engineer, SEMCO Component Quality Innovation Team) [willows78.ryu@samsung.com] In case that there is no reply from you regarding this PCN within 1 month, it would be considered | | | | |
| | that you agree this change and we will supply the products according to SAMSUNG plan. Customer / Company : | | | | |

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