

# GRM188R11E224KA88#

"#" indicates a package specification code.



< List of part numbers with package codes >  
GRM188R11E224KA88D , GRM188R11E224KA88J

## Shape

L size	1.6 ± 0.1mm
W size	0.8 ± 0.1mm
T size	0.8 ± 0.1mm
External terminal width e	0.2 to 0.5mm
Distance between external terminals g	0.5mm min.
Size code in inch(mm)	0603 (1608)

## References

Packaging	Specifications	Minimum quantity
D	180mm Paper taping	4000
J	330mm Paper taping	10000

Mass (typ.)	
1 piece	6.3mg
180mm Reel	144g

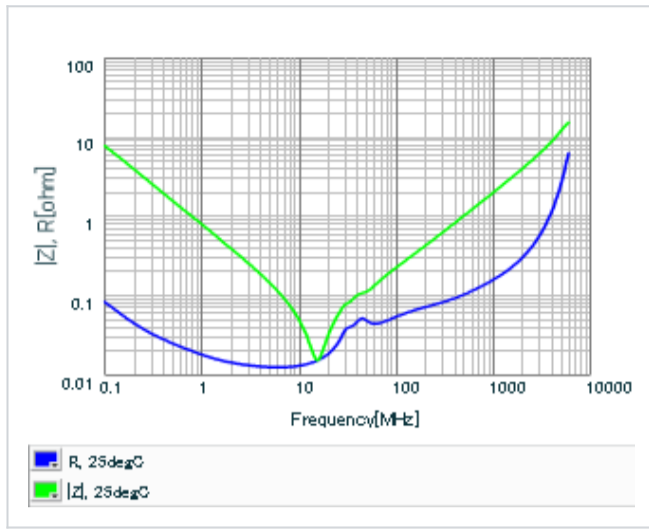
## Specifications

Capacitance	0.22μF ± 10%
Rated voltage	25Vdc
Temperature characteristics (complied standard)	R(JIS)
Capacitance change rate	± 15.0%
Temperature range of temperature characteristics	-55 to 125
Operating temperature range	-55 to 125

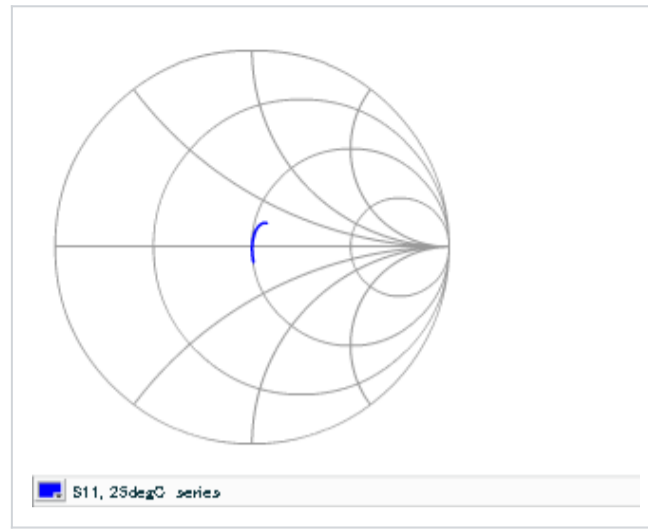
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- 2.This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering.

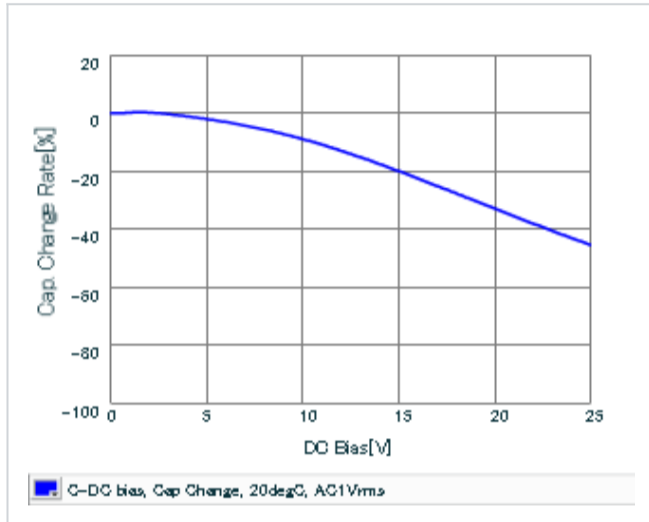
▪ Frequency characteristics (ESR, Impedance)



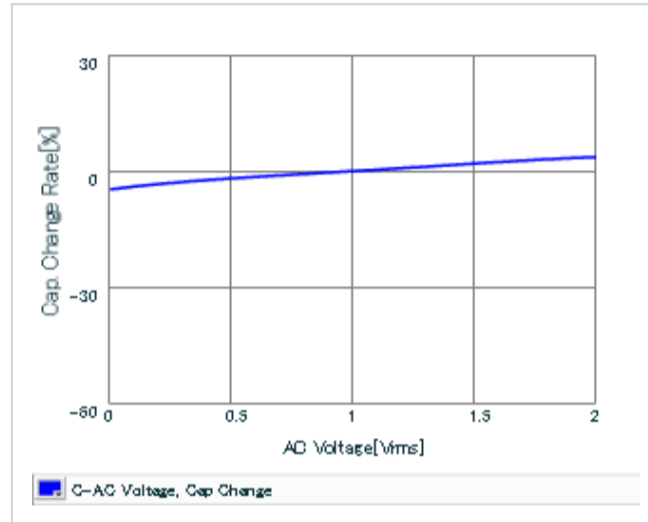
▪ S parameter (Smith chart S11)



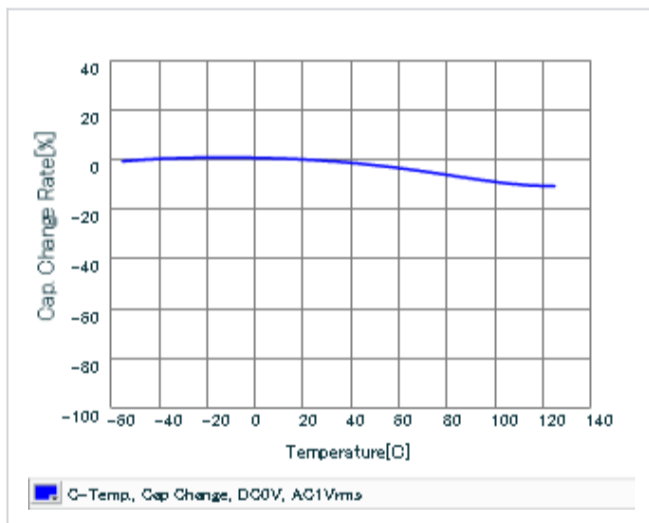
▪ DC bias characteristics



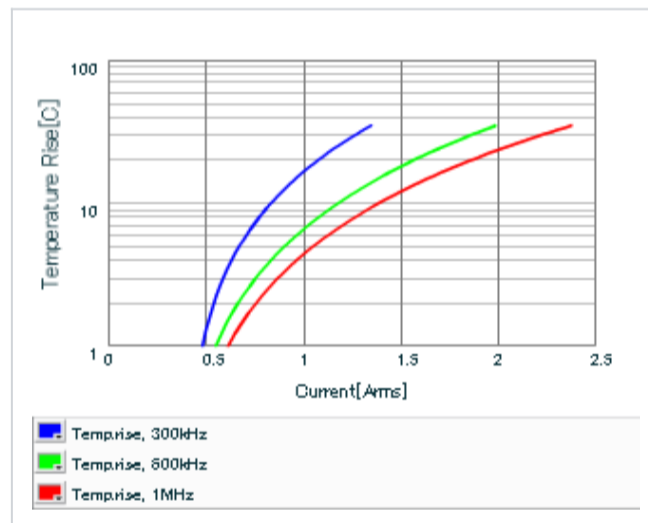
▪ AC voltage characteristics



▪ Capacitance - temperature characteristics



▪ Calorific property by ripple current



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