



RoHS (Restriction of Hazardous Substances)

Certificate of Compliance

MKS Instruments, Inc. hereby certifies that the products listed in the table below are compliant with the European Union's RoHS directive 2011/65/EU (effective 22 July 2017) regarding the restriction of the use of certain hazardous substances in electrical and electronic equipment. The products listed below are compliant to RoHS requirements for concentration limitations, by weight of homogeneous material, of the following six substances:

Lead	<0.1% (1000 PPM)
Mercury	<0.1% (1000 PPM)
Cadmium	<0.01% (100 PPM)
Hexavalent Chromium	<0.1% (1000 PPM)
Polybrominated Biphenyls (PBB)	<0.1% (1000 PPM)
Polybrominated Diphenyl Ethers (PBDE)	<0.1% (1000 PPM)


<u>Product</u>	<u>RoHS Compliant Part Number</u>
BIASED DET, 1.2 GHz, 300 - 1100 nm	818-BB-21
BIASED DET, 200 MHz, 200 - 1100 nm	818-BB-27
BIASED DET, 2 GHz, 1000 - 1600 nm	818-BB-30
BIASED DET, 2 GHz, 1000-1600 nm, FS	818-BB-31
DET, BIASED,15GHZ,1000-1650nm, FREE SP	818-BB-35
DET,BIASED, 9GHZ, 1000-1650NM, FS	818-BB-35A
DET, BIASED, 15GHZ, 1000-1650MM, FC	818-BB-35F
DET, BIASED 22GHZ, INGAAS, FREE SPACE	818-BB-36
DET, BIASED 22GHZ, INGAAS, FC/PC	818-BB-36F
BIASED DET, 25 MHz, 300 - 1100 nm	818-BB-40
BIASED DET, 12.5 GHz, 400-900 NM	818-BB-45
AMP BIASED DET, 9 GHz, 400-900 NM	818-BB-45A
AMP BIAS DET, 10 GHz, 500-900 NM,1M FC	818-BB-45AF
BIASED DET, 12.5 GHz, 500-900 NM, 1 M FC	818-BB-45F

DET, BIASED, 12.5GHZ,830-2150NM, FS	818-BB-51
DET, BIASED, 9 GHz, 900-2200 nm, AMP, FS	818-BB-51A
DET, BIASED, 9 GHz, 900-2200 nm, AMP, FC	818-BB-51AF
DET, BIASED, 10GHZ,900-2200NM,FC/UPC SM	818-BB-51F
AMP BIASED DET, 1.2 GHz, 300 - 1100 nm	818-BB-21A
AMP BIASED DET, 2 GHz, 1000 - 1600 nm	818-BB-30A

The above thresholds are not in place for any legally allowable exemptions per Annex III of the aforementioned directive. If such exemptions are in use, they are noted on the attached table. If no exemptions are in use, then no further information is provided.

All information provided in this Certificate of Compliance is accurate to MKS' knowledge as of the date of this certification. This confirmation is made based our internal engineering risk analysis of the individual items possibly being present along with the best technical information made available to MKS from its material suppliers.


 Gene Kuntz
 GM Instruments


 2/14/2020

MKS RoHS2 PRODUCT EXEMPTION LISTING

MKS Product Number	MKS Product Description	Annex III Exemption #	Annex III Exemption Description
818-BB-21A	AMP BIASED DET, 1.2 GHz, 300 - 1100 nm	7b	Lead in solders. There is possible lead in solder used inside the small amplifier
818-BB-30A	AMP BIASED DET, 2 GHz, 1000 - 1600 nm	7b	Lead in solders. There is possible lead in solder used inside the small amplifier