ON Semiconductor				10/15/2019
Base Part		NCV33164	HF	Pb-free
Orderable Part		NCV33164D-5R2G	Total weight (mg)	72
Homogenous Material	Weight (mg)	Substance in Mat.	CAS#	% Avg. Weight
Die	1.33	Silicon (Si)	7440-21-3	100
Die Attach		Silver (Ag)	7440-22-4	75
	2.4	Epoxy resins	129915-35-1	25
Lead Frame		Silver (Ag)	7440-22-4	2.1
		Zinc (Zn)	7440-66-6	0.2
		Iron (Fe)	7439-89-6	2.5
	37.61	Copper (Cu)	7440-50-8	95.2
Mold Compound- Black		Phenolic Resin	n/a	5
		Ortho Cresol Novolac Resin	29690-82-2	2
		Epoxy + Phenol Resin	n/a	5
		Carbon Black (C)	1333-86-4	0.5
	28.58	Fused Silica (SiO2)	60676-86-0	87.5
Plating	1.89	Tin (Sn)	7440-31-5	100
Wire Bond - Au	0.19	Gold (Au)	7440-57-5	100

Materials Disclosure Disclaimer: Even though all possible efforts have been made to provide you with the most accurate information, we cannot guarantee to its accuracy since the data has been compiled based on the ranges provided, and some information provided by the subcontractors and raw material suppliers may have been withheld to protect their business proprietary information. Thus this information is provided only as estimates, and do not include trace levels fo dopants and metal materials contained within silicon devices in the finished products. There is no intentional use of Mercury, Hexavalent Chromium, Cadmium, PBB or PBDE (5 of the 6 RoHS banned substances) in this or any of our other products. For further explanation on material composition calculations, please view our Product Chemical Content Brochure at:

http://www.onsemi.com/pub/Collateral/BRD8022-D.PDF