ON Semiconductor				7/21/2020
Base Part		NCP3284	HF	
Orderable Part		NCP3284MNTXG	Total weight (mg)	86.363237
Homogenous Material	Weight (mg)	Substance in Mat.	CAS #	% Avg. Weight
Clip		Zinc (Zn)	7440-66-6	0.11999367
		Iron (Fe)	7439-89-6	2.40000565
		Copper (Cu)	7440-50-8	97.40000491
	6.800359	Phosphorus (P)	7723-14-0	0.07999578
Clip Attach		Titanium Dioxide (TiO2)	13463-67-7	7.5
		Proprietary	proprietary	6.5
		Bismaleimide	13676-54-5	28
	0.1	PTFE	9002-84-0	58
Die	2.762874	Silicon (Si)	7440-21-3	100
Die Attach Solder		Silver (Ag)	7440-22-4	2.5
		Lead (Pb)	7439-92-1	92.5
	4.401028	Tin (Sn)	7440-31-5	5
Lead Frame		Silver (Ag)	7440-22-4	5
		Zinc (Zn)	7440-66-6	0.12
		Iron (Fe)	7439-89-6	2.4
		Copper (Cu)	7440-50-8	92.4
	32.999572	Phosphorus (P)	7723-14-0	0.08
Mold Compound- Black		Ortho Cresol Novolac Resin	29690-82-2	6.4999994
		Carbon Black (C)	1333-86-4	0.50000123
		Silica (SiO2)	14464-46-1	88.0000089
	36.099511	Phenolic Resin (Novolac)	9003-35-4	4.99999848
Plating	2.999832	Tin (Sn)	7440-31-5	100
Wire Bond - Cu		Palladium (Pd)	7440-05-3	1.8
		Gold (Au)	7440-57-5	0.1
	0.200061	Copper (Cu)	7440-50-8	98.1

**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 RoHS restricted substances. Lead (Pb) and lead oxide (PbO) are exempted with the RoHS exemption 7(a), 7(c) and 15. For further explanation on material composition calculations, please view our Product Chemical Content Brochure at:

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