

PEREGRINE MATERIAL DECLARATION FORM

Product:	PE4312
Ordering Codes:	PE4312C-Z
Description:	UltraCMOS® RF Digital Step Attenuator 6-bit, 31.5 dB, 1 MHz – 4 GHz
Package:	20L 4X4 QFN
Environmental Compliance	EU RoHS2 Directive 2011/65/EC, REACH - EU ECHA SVHC, Arsenic Free, JIG 101 - EIA/EICTA/JEITA, Halogen Free - IEC61249-2-21, PFOS Free - 2006/122/EC, Antimony Trioxide Free
Lead Finish	NiPdAu
Availability	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
Die					
Die	Aluminum oxide	1344-28-1	1.601087	3.52%	35,234
	Silicon	7440-21-3	0.000531	0.00%	12
	Arsenic*	7440-38-2	0.000003	0.00%	0
	Boron*	7440-42-8	0.000001	0.00%	0
	Phosphorus	7723-14-0	0.000179	0.00%	4
	Titanium	7440-32-6	0.000061	0.00%	1
	Tungsten*	7440-33-7	0.000005	0.00%	0
	Copper*	7440-50-8	0.000008	0.00%	0
	Aluminum	7429-90-5	0.002666	0.01%	59
Package					
Leadframe & Plating	Copper	7440-50-8	20.443000	44.99%	449,872
	Iron	7439-89-6	0.049300	0.11%	1,085
	Zinc	7440-66-6	0.026000	0.06%	572
	Phosphorous	7723-14-0	0.017000	0.04%	374
	Nickel	7440-02-0	0.407000	0.90%	8,957
	Palladium	7440-05-3	0.011000	0.02%	242
	Gold	7440-57-5	0.004000	0.01%	88
Die Attach	Proprietary Acrylates	Trade secret	0.045000	0.10%	990
	Silver	7440-22-4	0.277000	0.61%	6,096
	Proprietary Bismaleimide	Trade secret	0.010000	0.02%	220
	Methacrylate Ester	Trade secret	0.010000	0.02%	220
	Proprietary polymer	Trade secret	0.004000	0.01%	88
Wire	Gold	7440-57-5	0.689000	1.52%	15,162
	Calcium*	7440-70-2	0.000000	0.00%	0
Mold Compound	Multi-aromatic resin	Trade secret	3.058000	6.73%	67,295
	Silica Fused	60676-86-0	18.787000	41.34%	413,430
Total Weight (mg)			45.441840	1.0000000	1,000,000

Note: * Amount concentrations are in parts per billion (PPB) range and therefore appear as zero in parts per million (PPM).