

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE4302
<b>Ordering Codes:</b>	4302-51; 4302-52
<b>Description:</b>	RF Digital Step Attenuator (Monolithic) - 50 Ohm
<b>Package:</b>	20L 4X4 QFN
<b>RoHS Compliant</b>	Yes
<b>Lead Finish</b>	100% Matte Tin
<b>Availability</b>	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire:	1344-28-1	2.377652	5.33%	53,284
	Silicon	7440-21-3	0.000263	0.00%	6
	Silicon Dioxide	7631-86-9	0.013084	0.03%	293
	Silicon Nitride	12033-89-5	0.005707	0.01%	128
	Tungsten Silicide	12039-88-2	0.000310	0.00%	7
	Titanium	7440-33-6	0.000564	0.00%	13
	Titanium Nitride	25583-20-4	0.001396	0.00%	31
	Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu)	7429-90-5	0.011707	0.03%	262
	Arsenic	7440-38-2	0.000001	0.00%	0
	Boron	7440-42-8	0.000333	0.00%	7
	Phosphorous	7723-14-0	0.000201	0.00%	5
<b>Package</b>					
Leadframe 421950	Copper (Cu)	7440-50-8	13.837525	31.01%	310,104
	Iron (Fe)	7439-89-6	0.333520	0.75%	7,474
	Zinc (Zn)	7440-66-6	0.017031	0.04%	382
	Phosphorus (P)	7723-14-0	0.004258	0.01%	95
	Ag (weight estimate)	7440-22-4	0.168000	0.38%	3,765
Die Attach	Silver (65 - 85)	7440-22-4	0.129812	0.29%	2,909
	Epoxy Resin (15 - 25)	9003-36-5	0.034617	0.08%	776
	t-Butyl phenyl glycidyl ether (5-10)	3101-60-8	0.012981	0.03%	291
	Phenolic harder (1-2)	92-88-6	0.002596	0.01%	58
	Butyl cellosolve acetate (0.5-1.5)	112-07-2	0.001731	0.00%	39
Gold Wire	Au	7440-57-5	0.260500	0.58%	5,838
	Ag	7440-22-4	0.000045	0.00%	1
	Cu	7440-50-8	0.000045	0.00%	1
	Fe	7439-89-6	0.000090	0.00%	2
	Mg	7439-95-4	0.000045	0.00%	1
	Ca	7440-70-2	0.000045	0.00%	1
	Be	7440-41-7	0.000224	0.00%	5
100% Matte Tin Lead Finish	Sn	7440-31-5	0.788200	1.77%	17,664
Mold Compound	Silica Fused (75-95)	60676-86-0	21.400449	52.82%	528,202
	Epoxy Resin (1-5)	Trade secret	1.940022	4.35%	43,499
	Phenol Resin (1-5)	Trade secret	0.970511	2.17%	21,750
	Carbon Black (0.1-0.5)	1333-86-4	0.138644	0.31%	3,107
<b>Total Weight (mg)</b>			<b>42.452109</b>	100.00%	1,000,000