

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE43204
<b>Ordering Codes:</b>	PE43204-MLIBA, PE43204-MLIBA-Z
<b>Description:</b>	50 Ohm Digital Step Attenuator
<b>Package:</b>	12 lead 3 X 3 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	0.630415	3.22%	32,185
	Silicon:	7440-21-3	0.000070	0.00%	4
	Silicon Dioxide:	7631-86-9	0.003469	0.02%	177
	Silicon Nitride:	12033-89-5	0.001513	0.01%	77
	Tungsten Silicide:	12039-88-2	0.000082	0.00%	4
	Titanium:	7440-33-6	0.000149	0.00%	8
	Titanium Nitride:	25583-20-4	0.000369	0.00%	19
	Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu):	7429-90-5	0.000310	0.00%	16
	Arsenic:	7440-38-2	0.000001	0.00%	0
	Boron:	7440-42-8	0.000088	0.00%	4
	Phosphorous:	7723-14-0	0.000053	0.00%	3
<b>Package</b>					
Leadframe	Cu:	7440-50-8	4.495674	22.95%	229,518
	Fe:	7439-89-6	0.108915	0.56%	5,560
	Zn:	7440-66-6	0.005793	0.03%	296
	P:	7723-14-0	0.003824	0.02%	195
	Ag (weight estimate):	7440-22-4	0.019118	0.10%	976
Die Attach Material	Silver (65 - 85):	7440-22-4	0.033000	0.17%	1,685
	Epoxy Resin (15 - 25):	9003-36-5	0.264000	1.35%	13,478
	t-Butyl phenyl glycidyl ether (5 - 10):	3101-60-8	0.012981	0.07%	663
	Phenolic hardener (1 - 2):	92-88-6	0.002596	0.01%	133
	Butyl cellosolve acetate (0.5 - 1.5):	112-07-2	0.001731	0.01%	88
Gold Wire	Au:	7440-57-5	0.260500	1.33%	13,299
	Ag:	7440-22-4	0.000045	0.00%	2
	Cu:	7440-50-8	0.000045	0.00%	2
	Fe:	7439-89-6	0.000090	0.00%	5
	Mg:	7439-95-4	0.000045	0.00%	2
	Ca:	7440-70-2	0.000045	0.00%	2
	Be:	7440-41-7	0.000224	0.00%	11
100% Matte Tin Lead Finish	Sn:	7440-31-5	0.418457	2.14%	21,364
Mold Compound	Silica Fused (75 - 95)	60676-86-0	11.736040	59.92%	599,161
	Epoxy Resin (1 - 5)	Trade Secret	0.690355	3.52%	35,245
	Phenol Resin (1 - 5)	Trade Secret	0.690355	3.52%	35,245
	Carbon Black	1333-86-4	0.207107	1.06%	10,573
<b>Total Weight (mg)</b>			<b>19.587459</b>	<b>100.00%</b>	<b>1000000</b>