

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE45450
<b>Ordering Codes:</b>	PE45450A-X
<b>Description:</b>	UltraCMOS® Power Limiter 9 kHz – 6 GHz
<b>Package:</b>	12L 3x3 QFN
<b>Environmental Compliance</b>	EU RoHS2 Directive 2011/65/EC, <b>REACH</b> - EU ECHA SVHC, <b>Arsenic Free</b> , <b>JIG 101</b> - EIA/EICTA/JEITA, <b>Halogen Free</b> - IEC61249-2-21, <b>PFOS Free</b> - 2006/122/EC, <b>Antimony Trioxide Free</b>
<b>Lead Finish</b>	NiPdAu
<b>Availability</b>	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	1.063650	6.06%	60,598
<b>Package</b>					
Leadframe	Copper (Cu)	7440-50-8	9.500000	54.12%	541,229
	Nickel (Ni)	7440-02-0	0.300000	1.71%	17,091
	Silicon (Si)	7440-50-8	0.100000	0.57%	5,697
	Magnesium (Mg)	7439-95-4	0.000000	0.00%	0
Frame Plating	Nickel (Ni)	7440-02-0	0.203000	1.16%	11,565
	Palladium (Pd)	7440-05-3	0.004000	0.02%	228
	Gold (Au)	7440-57-5	0.001000	0.01%	57
External Plating	Nickel (Ni)	7440-02-0	0.038000	0.22%	2,165
	Palladium (Pd)	7440-05-3	0.002000	0.01%	114
	Gold (Au)	7440-57-5	0.002000	0.01%	114
Die Attach	Proprietary Acrylates	Trade secret	0.025000	0.14%	1,424
	Silver (Ag)	7440-22-4	0.151000	0.86%	8,603
	Proprietary Bismaleimide	Trade secret	0.006000	0.03%	342
	Methacrylate Ester	Trade secret	0.005000	0.03%	285
	Proprietary polymer	Trade secret	0.002000	0.01%	114
Wire	Gold (Au)	7440-57-5	0.250000	1.42%	14,243
	Calcium (Ca)	7440-70-2	0.000000	0.00%	0
Mold Compound	Biphenyl Resin	Trade secret	0.800000	4.56%	45,577
	Silica Fused (SiO <sub>2</sub> )	60676-86-0	5.100000	29.06%	290,554
<b>Total Weight (mg)</b>			<b>17.552650</b>	100.00%	1,000,000