

PEREGRINE MATERIAL DECLARATION FORM

Product:	PE4280
Ordering Codes:	4280-51, 4280-52
Description:	75 Ohm SPDT CATV UltraCMOS Switch 5 MHz - 2.2 GHz
Package:	20L 4X4 QFN
Environmental Compliance	EU RoHS Directive 2002/95/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	100% Matte Tin
Availability	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
Die					
	Sapphire (Al ₂ O ₃)	1344-28-1	1.170990	2.70%	26,995
	Silicon (Si)	7440-21-3	0.000389	0.00%	9
	Arsenic (As)	7440-38-2	0.000002	0.00%	0
	Boron (B)	7440-42-8	0.000001	0.00%	0
	Phosphorous (P)	7723-14-0	0.000131	0.00%	3
	Titanium (Ti)	7440-32-6	0.000045	0.00%	1
	Tungsten (W)	7440-33-7	0.000004	0.00%	0
	Copper (Cu)	7440-50-8	0.000006	0.00%	0
	Aluminum (Al)	7429-90-5	0.001949	0.00%	45
	Cobalt (Co)	7440-48-4	0.000000	0.00%	0
Package					
Leadframe	Copper (Cu)	7440-50-8	13.633600	31.43%	314,295
	Iron (Fe)	7439-89-6	0.328600	0.76%	7,575
	Zinc (Zn)	7440-66-6	0.016800	0.04%	387
	Phosphorus (P)	7723-14-0	0.004200	0.01%	97
	Silver (Ag)	7440-22-4	0.377200	0.87%	8,696
Die Attach	Silver (Ag)	7440-22-4	0.124600	0.29%	2,872
	Epoxy Resin	9003-36-5	0.031200	0.07%	719
	t-Butyl phenyl glycidyl ether	3101-60-8	0.013000	0.03%	300
	Phenolic hardener	92-88-6	0.002600	0.01%	60
	Butyl cellosolve acetate	112-07-2	0.001700	0.00%	39
Gold Wire	Gold (Au)	7440-57-5	0.260500	0.60%	6,005
100% Matte Tin Lead Finish	Tin (Sn)	7440-31-5	0.791200	1.82%	18,239
Mold Compound	Silica Fused	60676-86-0	24.410200	56.27%	562,727
	Epoxy Resin	Trade secret	1.064800	2.45%	24,547
	Phenol Resin	Trade secret	1.064800	2.45%	24,547
	Carbon Black	1333-86-4	0.079900	0.18%	1,842
Total Weight (mg)			43.378416	100.00%	1,000,000

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Product:	PE4280
Ordering Codes:	PE4280MLIAA, PE4280MLIAA-Z
Description:	75 Ohm SPDT CATV UltraCMOS Switch 5 MHz - 2.2 GHz
Package:	20L 4X4 QFN
Environmental Compliance	EU RoHS Directive 2002/95/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					
	Sapphire (Al ₂ O ₃)	1344-28-1	1.170990	2.89%	28,859
	Silicon (Si)	7440-21-3	0.000389	0.00%	10
	Arsenic (As)	7440-38-2	0.000002	0.00%	0
	Boron (B)	7440-42-8	0.000001	0.00%	0
	Phosphorous (P)	7723-14-0	0.000131	0.00%	3
	Titanium (Ti)	7440-32-6	0.000045	0.00%	1
	Tungsten (W)	7440-33-7	0.000004	0.00%	0
	Copper (Cu)	7440-50-8	0.000006	0.00%	0
	Aluminum (Al)	7429-90-5	0.001949	0.00%	48
	Cobalt (Co)	7440-48-4	0.000000	0.00%	0
Package					
Leadframe	Copper (Cu)	7440-50-8	15.510800	38.23%	382,258
	Iron (Fe)	7439-89-6	0.373900	0.92%	9,215
	Zinc (Zn)	7440-66-6	0.019100	0.05%	471
	Phosphorus (P)	7723-14-0	0.004800	0.01%	118
Die Attach	Silver (Ag)	7440-22-4	0.130900	0.32%	3,226
	Epoxy Resin	9003-36-5	0.016400	0.04%	404
	Diluent	26447-14-3	0.009800	0.02%	242
	Dicyandiamide	461-58-5	0.001600	0.00%	39
	Hardener	620-92-8	0.004900	0.01%	121
Gold Wire	Gold (Au)	7440-57-5	0.301300	0.74%	7,425
Internal Plating	Nickel (Ni)	7440-02-0	0.071600	0.18%	1,765
	Palladium (Pd)	7440-05-3	0.005800	0.01%	143
	Gold (Au)	7440-57-5	0.000200	0.00%	5
External Plating	Nickel (Ni)	7440-02-0	0.047700	0.12%	1,176
	Palladium (Pd)	7440-05-3	0.003900	0.01%	96
	Gold (Au)	7440-57-5	0.000160	0.00%	4
Mold Compound	Silica Fused	60676-86-0	20.999700	51.75%	517,530
	Epoxy Resin	Trade secret	0.916000	2.26%	22,574
	Phenol Resin	Trade secret	0.916000	2.26%	22,574
	Carbon Black	1333-86-4	0.068700	0.17%	1,693
Total Weight (mg)			40.576776	100.00%	1,000,000