



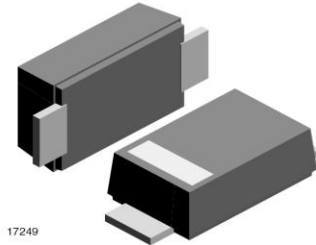
SEMICONDUCTOR Small Signal Products

MATERIAL CONTENT LIST

PACKAGE FAMILY: **DO-219AB (SMF) - M**
 DATE: **18-Feb-2021**
 REVISION: **5**

**HALOGEN
FREE**

**RoHS
COMPLIANT**



MATERIAL CONTENT					
Part	Material	CAS N°	weight mg	% of weight	ppm of total weight
Lead frame 21.2%	Cu	7440-50-8	3.14	99.81%	212039
	Fe	7439-89-6	0.0047	0.15%	319
	P	7723-14-0	0.0013	0.04%	85
	TOTAL		3.15		
Clip 20.27%	Cu	7440-50-8	2.999	99.81%	202279
	Fe	7439-89-6	0.005	0.15%	304
	P	7723-14-0	0.001	0.04%	81
	TOTAL		3.005		
Terminal finish 1.4%	Sn	7440-31-5	0.210	100.0%	14163
	TOTAL		0.21		
Die solder (solder paste) 1.4%	Pb *)	7439-92-1	0.1943	92.50%	13101
	Sn	7440-31-5	0.0105	5.00%	708
	Ag	7440-22-4	0.0053	2.50%	354
	TOTAL		0.21		
chip 5.0%	Silicon and other	trade secrete	0.741	100.0%	49954
	TOTAL		0.741		
Molding compound 50.7%	Fused Silica	60676-86-0	6.01	80.00%	405290
	Cured polymer (epoxy + phenolic resin reacted)	26834-02-6	1.46	19.47%	98466
	Carbon Balck	1333-86-4	0.04	0.53%	2662
	TOTAL		7.51		
Total weight			14.8275		

Remark: Total weight range $\pm 10\%$
 *) Lead in high melting temperature type solder acc. RoHS exempted
 **) N. D. = not detected
 Reflow Soldering acc. J-STD-020
 Material Analyses Reports available on request