

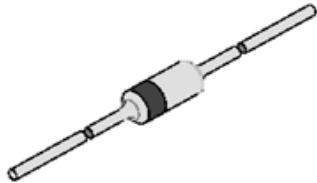


# SEMICONDUCTOR Small Signal Products

## MATERIAL CONTENT LIST

PACKAGE  
FAMILY: **DO-35**  
DATE: **20-May-2021**  
REVISION: **11**

**HALOGEN** **RoHS**  
**FREE** COMPLIANT



MATERIAL CONTENT					
Part	Material	CAS N°	weight mg	% of weight	ppm of total weight
<b>Leads</b> <b>85.2%</b>	Fe	7439-89-6	67.17	63.1%	537214
	Cu	7440-50-8	29.78	28.0%	238175
	Ni	7440-02-0	9.43	8.9%	75420
	CuO	1317-38-0	0.110	0.1%	880
	<b>TOTAL</b>		<b>106.490</b>		
<b>Terminal finish</b> <b>0.5%</b>	Sn	7440-31-5	0.55	96.5%	4399
	Ag	7440-22-4	0.02	3.5%	160
	<b>TOTAL</b>		<b>0.570</b>		
<b>Package glass</b> <b>14.3%</b>	PbO *)	1317-36-8	10.90	61.1%	87176
	SiO <sub>2</sub>	14808-60-7	5.70	32.0%	45588
	K <sub>2</sub> O	12136-45-7	0.66	3.7%	5279
	Na <sub>2</sub> O	1313-59-3	0.005	0.03%	40
	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	0.02	0.11%	160
	B <sub>2</sub> O <sub>3</sub>	1303-86-2	0.525	2.9%	4199
	Sb <sup>3+</sup> ***)	7440-36-0	0.028	0.16%	224
<b>TOTAL</b>		<b>17.838</b>			
<b>Silicon</b> <b>0.08%</b>	Si	7440-21-3	0.1003	100.0%	802
			<b>0.100</b>		
<b>Chip Passivation</b> <b>0.003%</b>	SiO <sub>2</sub>	14808-60-7	0.002	52.6%	16
	PbO *)	1317-36-8	0.002	47.4%	14
			<b>0.004</b>		
<b>chip Metallization</b> <b>0.02%</b>	Ag	7440-22-4	0.021	98.6%	166
	Ni	7440-02-0	0.0003	1.4%	2
	<b>TOTAL</b>		<b>0.021</b>		
<b>Ink</b> <b>0.01%</b>	Carbon black	1333-86-4	0.004	34.4%	30
	Phenol	108-95-2	0.001	5.1%	4
	Tributyl phosphate	126-73-8	0.007	60.4%	52
	<b>TOTAL</b>		<b>0.011</b>		
<b>Total weight</b>			<b>125.034</b>		

Remarks: Total weight range ± 10%  
 \*) Pb in glass of electronic components acc. RoHS exempted; Lead Monoxide just raw ingredient for glass production, but not present as such in glass anymore  
 \*\*) Not detected  
 \*\*\*) Antimony present as ion  
 Wave Soldering acc. CECC00802  
 Material Analyses Reports available on request