BALANCED DUAL-LINE EMI FILTER

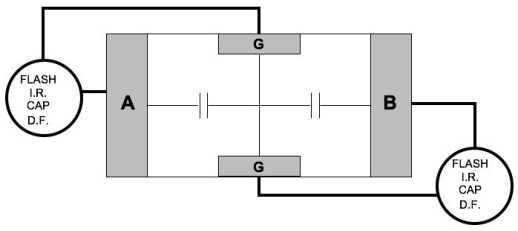
OVERVIEW: Multilayer chip EMI Filter has balanced impedance for superior filtering of radiated and conducted common-mode EMC noise. The terminal arrangement of this low ESL component also supports connection option for single-ended (power bypass) noise reduction applications.

PART NUMBER: E18M0035B100MN

E18M	0035	B	100	M	N
Size 1206 (3216)	SRF 35 MHz	TC +/- 15%	Voltage 100 VDC	Cap. Tol ± 20%	Terminal Standard

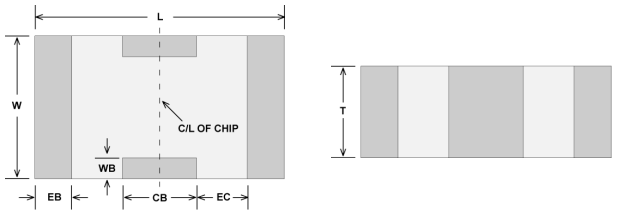
CHARACTERISTICS:

Case Size	1206 EIA (3216 Metric)
SRF	35MHz
Inductance:	56pH power bypass, 212pH dual-line EMI filter
Capacitance:	100nF (x 2)
Rated Voltage:	100 VDC
Temperature Coefficient:	±15% (-55 to +125°C)
Dissipation Factor:	≤ 2.5% (0.025)
Insulation Resistance:	IR> 500 Ω•F or 10GΩ whichever is less Measurement at 25°C, WVDC, time is 2 minutes max.
Dielectric Strength:	2.5XWVDC, 25°C, 50mA max.
Capacitance Aging:	≤ 2.5%/decade hour
Test Conditions:	1kHz±50Hz; 1.0±0.2VRMS



PHYSICAL SIZE:

SIZE	IN	(mm)
L	.124 ± .010	3.15 ± .254
W	.063 ± .010	1.60 ± .254
T	.050 max.	1.27 max.
EB	.016 ± .010	.406 ± .254
CB	.040 ± .005	1.016 ± .127
WB	006 ± .004	.152 ± .100

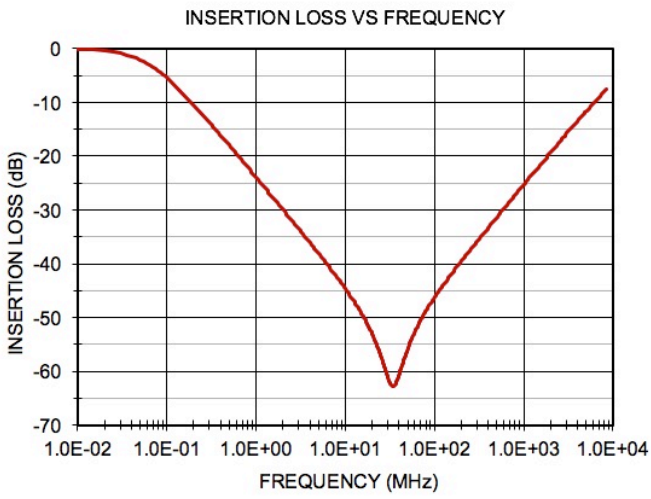
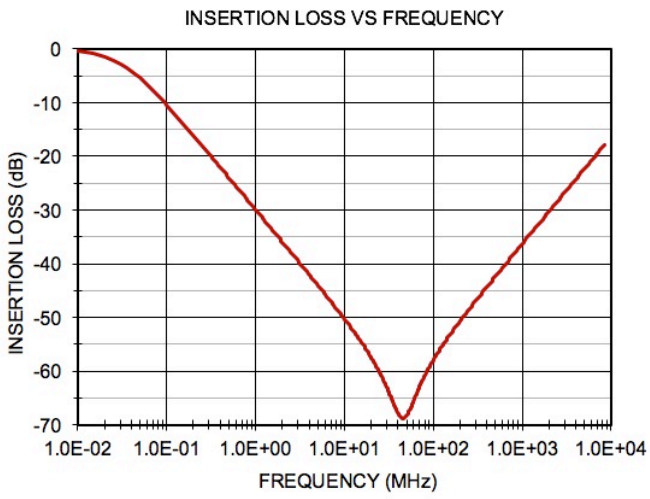
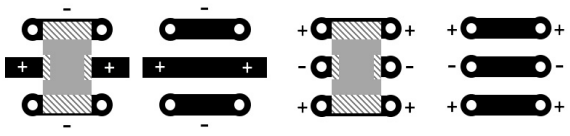


ENVIRONMENTAL

Meets Rohs & Reach directives	MSL Rating: 1

BALANCED DUAL-LINE EMI FILTER

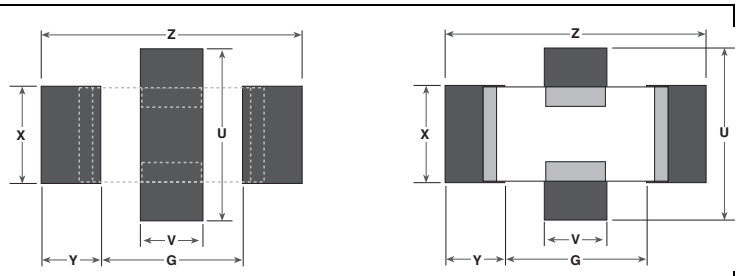
EMI FILTER INSERTION LOSS

DUAL LINE CONNECTION*	PWR BYPASS CONNECTION
	
	

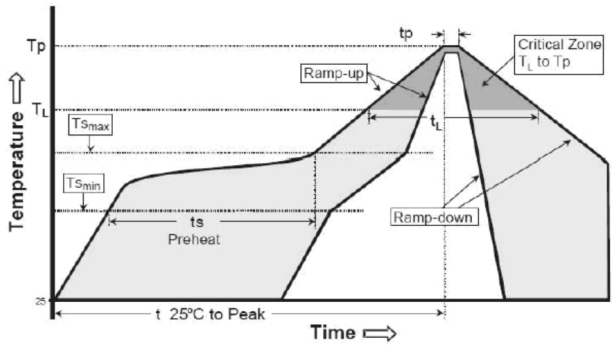
*EMC performance is a function both insertion loss and impedance matching / low noise-mode conversion.
Connection graphics are representative, not all possible options are shown.
PCB layout is critical for correct RF response. Technical support is available for new designs.

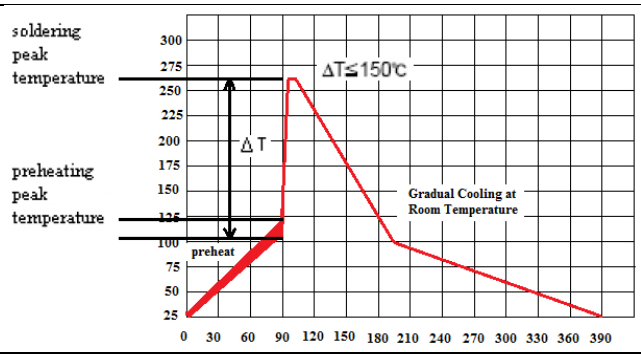
SOLDER PAD RECOMMENDATIONS:

	SOLDER REFLOW		SOLDER WAVE	
	IN	mm	IN	mm
X	0.065	1.650	0.046	1.160
Y	0.040	1.020	0.040	1.020
G	0.080	2.030	0.080	2.030
V	0.040	1.020	0.040	1.020
U	0.120	3.050	0.120	3.050
Z	0.160	4.060	0.160	4.060



SOLDER PROCESS RECOMMENDATIONS:

SOLDER REFLOW: Recommended temperature profiles for reflow soldering are shown in Table 1 and Figure 1 from J-STD-020C	
Preheat ramp: 1-3°C/sec.	
Preheat: 75-125°C < T (max)	
T (max): 210-260°C	

SOLDER WAVE: Caution, NOT recommended for sizes >1206	
Preheat Temp.:100-120°C	
∆ T Pre-Heat: 150°C max.	
Soldering Peak Temp.: 250-260°C, 5 SEC. max.	
Cool Down: <2°C/SEC	

SOLDERING IRON: **NOT SUPPORTED** for use in mass production Not recommended for lab proto-typing, use solder reflow, hot-air tool, or conductive epoxy to avoid thermal damage and compromised test results. If Iron is used, follow below precautions:
• Preheat circuit and capacitors to within 100° C of soldering temperature
• No contact of iron tip with component
• 20 watt iron output (max)
• 350° C tip temperature (max)
• 1.0 mm tip diameter (max)
• Limit soldering time to 3 sec. (max)

PACKAGING SPECIFICATIONS

Specification EIA standard 481

PART SIZE	7" REEL QTY
1206 (3216)	3,000

CONTAC INFORMATION
SHENZHEN TOP-FLIGHT TECHNOLOGY CO.,LTD
4th Floor,C Building,Quan sen Industrial Park,Bulong Road,Long hua New District,ShenzhenTel: 86-18664789275 Fax:86-755-82908701 Email: lxk@topleve.com
Website:http://www.topleve.com