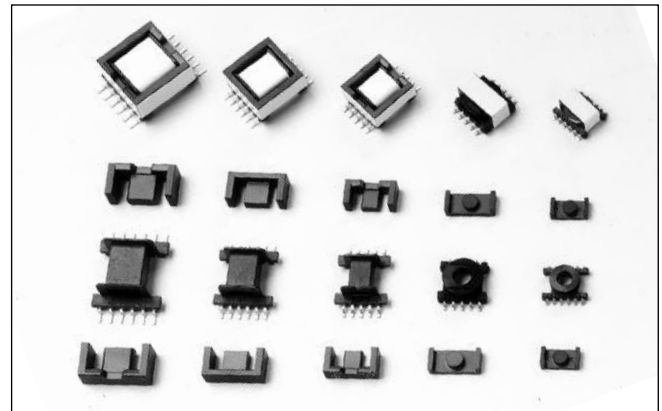


Description

- Low cost magnetic components for custom specifications
- Power range from 1 Watt to 120 Watts
- Frequency range from 20kHz to .5MHz
- High power density and low radiated noise
- Meets UL 94V-0 flammability standard
- Ferrite core material



Applications

- Inductors: buck, boost, coupled, choke, filter, resonant, noise filtering, differential, forward, common mode
- Transformers: flyback, feed forward, push-pull, multiple output, inverter, step-up, step-down, gate drive, base drive, wide band, pulse, control, impedance, isolation, bridging, ringer, converter, auto

Environmental Data

- Storage temperature range: -55°C to +125°C
- Operating ambient temperature range: -40°C to +85°C (range is application specific). The internal "hot spot" temperature defines the maximum allowable currents, which are limited to 130°C, including ambient
- Solder reflow temperature: +260°C max. for 10 seconds max.

Packaging

- Supplied in tape and reel packaging (SG01, SG02, SG03, SG06 and SG07)
- Supplied in bulk packaging (SG04, SG05, SG08 and SG09)
- Consult the factory for SG04 and SG05 tape and reel packaging

STANDARD GEOMETRIES SIZES 1 TO 5 CORE AND BOBBIN PARAMETERS

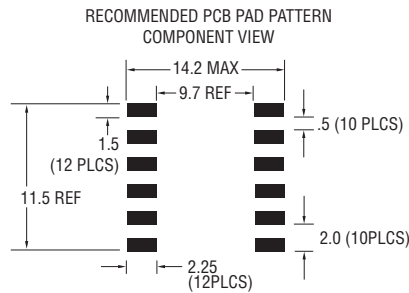
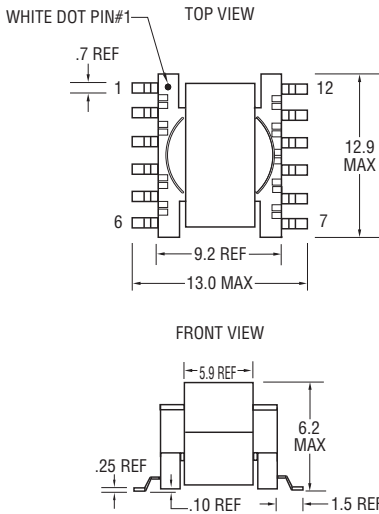
Specifications	SG1	SG2	SG3	SG4	SG5
Core	ER 11/5	ER 14.5/6	EFD 15	EFD 17	EFD 20
AL-1, nH/T ²	1400	1600	780	1028	1200
AL-2, nH/T ²	190	216	138	140	155
AL-3, nH/T ²	102	116	84	75	83
AL-4, nH/T ²	76	83	55	60	67
AL-5, nH/T ²	59	66	47	47	53
Ae, min. core area, cm ²	0.0900	0.1520	0.1220	0.1960	0.3100
le, mag. path lgth., cm	1.46	1.90	3.40	4.12	4.70
Ve, core volume, cm ³	0.170	0.330	0.510	0.940	1.460
MLT, ave. turn length, cm	2.1666	2.7051	2.6805	3.2202	3.8359
Wa, usable wdg. area, cm ² *	0.0171	0.0302	0.0915	0.1051	0.1441
WaAc, cm ⁴	0.0015	0.0046	0.0112	0.0206	0.0447
UL flammability rating	94V-0	94V-0	94V-0	94V-0	94V-0

STANDARD GEOMETRIES SIZES 6 TO 9 CORE AND BOBBIN PARAMETERS

Specifications	SG6	SG7	SG8	SG9
Core	EE8.3	EF12.6	EE13	SEE16
AL-1, nH/T ²	675	1075	1100	1254
AL-2, nH/T ²	96	95	128	153
AL-3, nH/T ²	—	—	—	—
AL-4, nH/T ²	58	57	77	92
AL-5, nH/T ²	—	—	—	—
Ae, min. core area, cm ²	0.0600	0.1003	0.1380	0.1848
le, mag. path lgth., cm	1.92	2.96	3.06	3.55
Ve, core volume, cm ³	0.1564	0.3860	0.5479	0.8552
MLT, ave. turn length, cm	2.0880	2.5480	3.2300	3.7780
Wa, usable wdg. area, cm ² *	0.0317	0.0769	0.1114	0.1849
WaAc, cm ⁴	0.00190	0.00772	0.01540	0.03416
UL flammability rating	94V-0	94V-0	94V-0	94V-0

* Fill Factor considered

Mechanical Diagrams



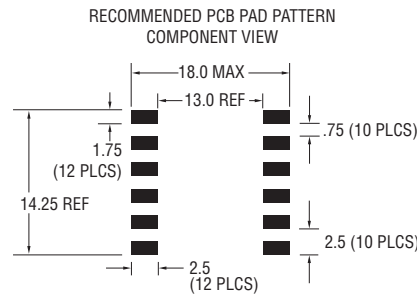
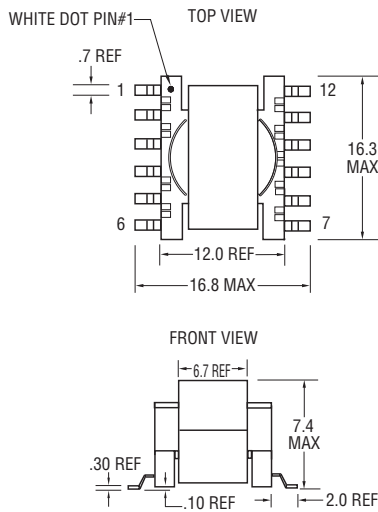
SG SIZE 1
ER 11/5



PACKAGING INFORMATION

Parts packaged on 13" reels,
600 parts per reel.

Bulk packaging also available.



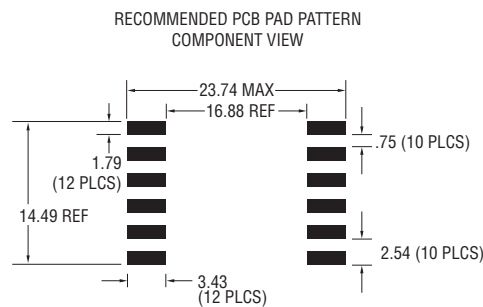
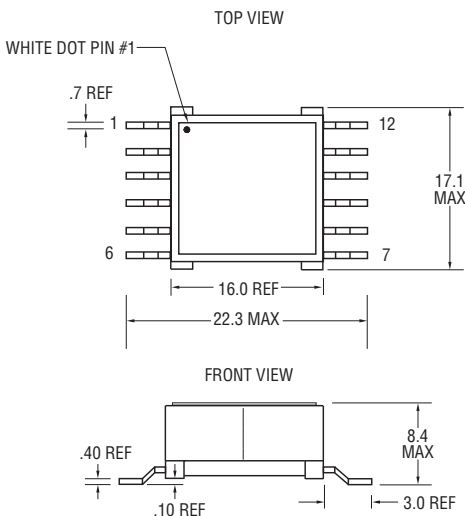
SG SIZE 2
ER 14.5/6



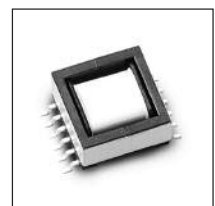
PACKAGING INFORMATION

Parts packaged on 13" reels,
300 parts per reel.

Bulk packaging also available.



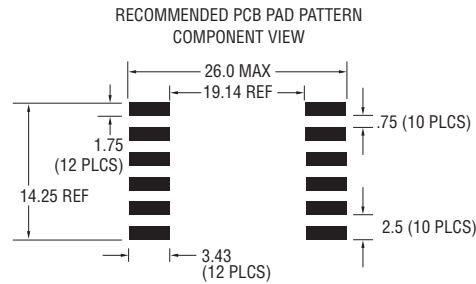
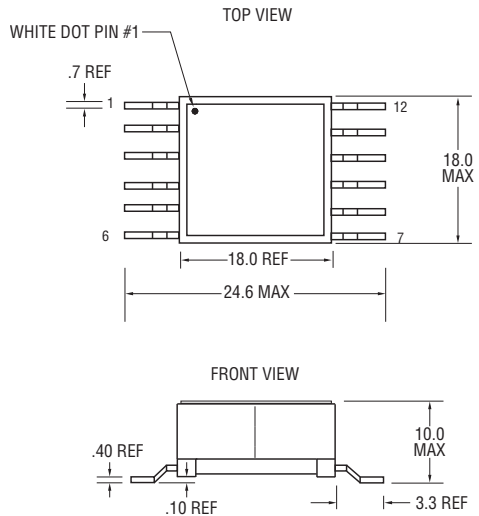
SG SIZE 3
EFD 15



PACKAGING INFORMATION

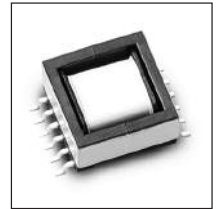
Parts packaged on 13" reels,
200 parts per reel.

Bulk packaging also available.



SG SIZE 4

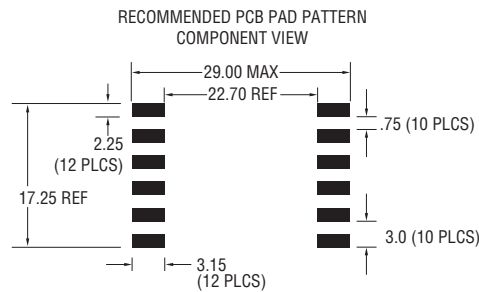
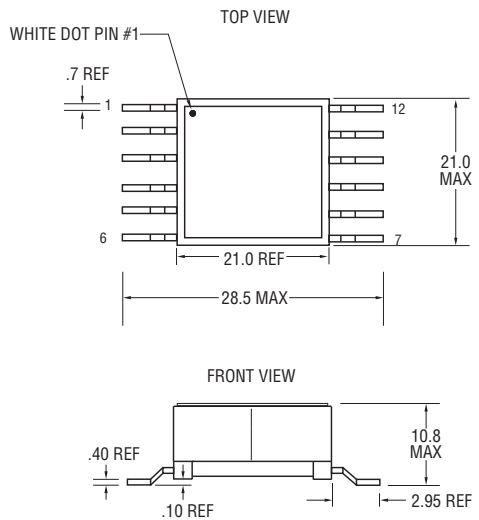
EFD 17



PACKAGING INFORMATION

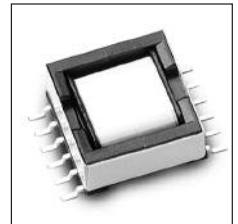
Parts packaged in pick and place compatible bulk trays, 9.8" x 6.7", 6 rows by 7 columns, 42 parts per tray.

Consult factory for tape and reel packaging.



SG SIZE 5

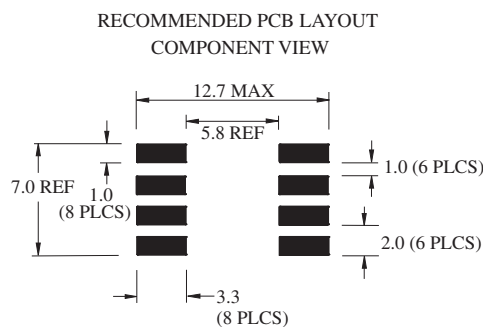
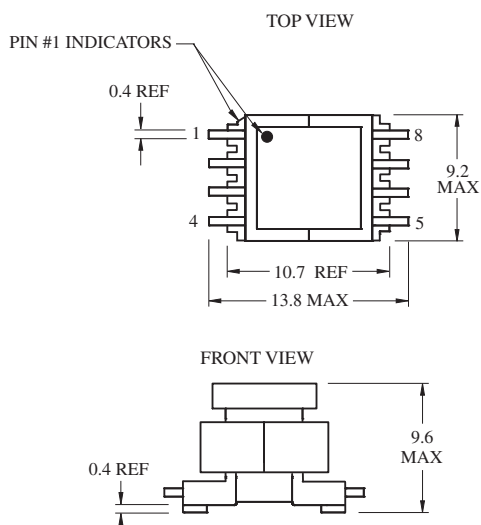
EFD 20



PACKAGING INFORMATION

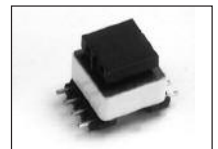
Parts packaged in pick and place compatible bulk trays, 9.8" x 6.7", 5 rows by 7 columns, 35 parts per tray.

Consult factory for tape and reel packaging.



SG SIZE 6

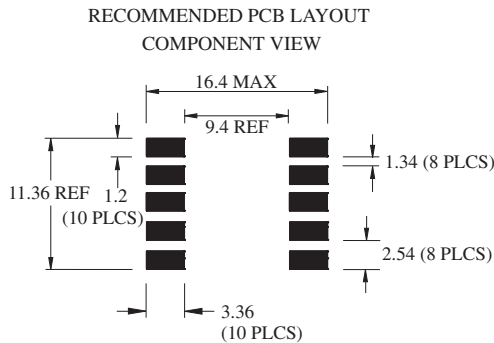
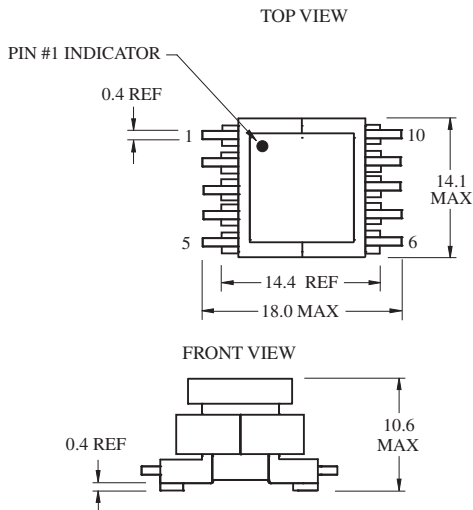
EE 8.3



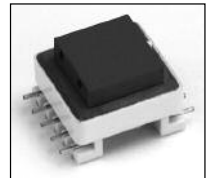
PACKAGING INFORMATION

Parts packaged on 13" reels, 400 parts per reel.

Bulk packaging also available.



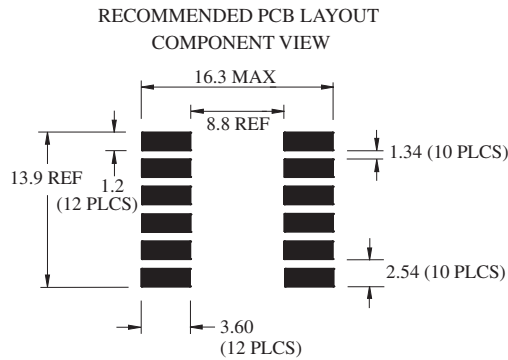
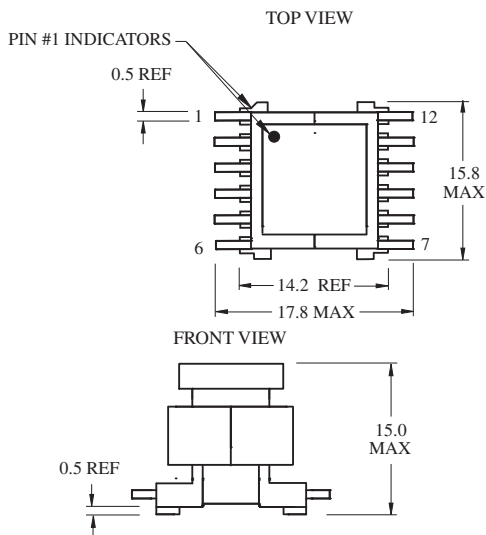
SG SIZE 7 EF 12.6



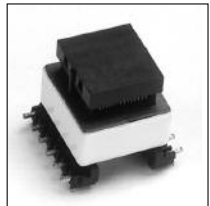
PACKAGING INFORMATION

Parts packaged on 13" reels,
250 parts per reel.

Bulk packaging also available.

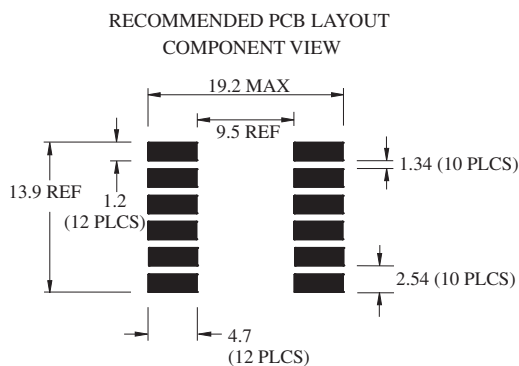
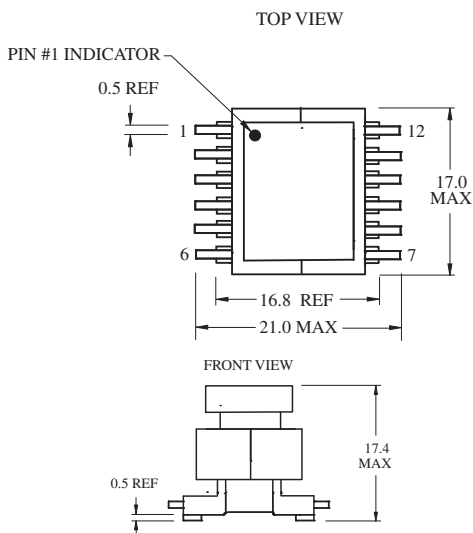


SG SIZE 8 EE 13

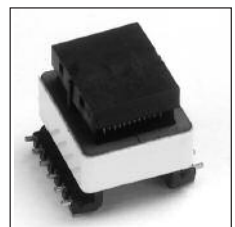


PACKAGING INFORMATION

Parts packaged in pick and
place compatible bulk trays,
6 rows by 10 columns.
Total parts per tray = 60.



SG SIZE 9 SEE 16

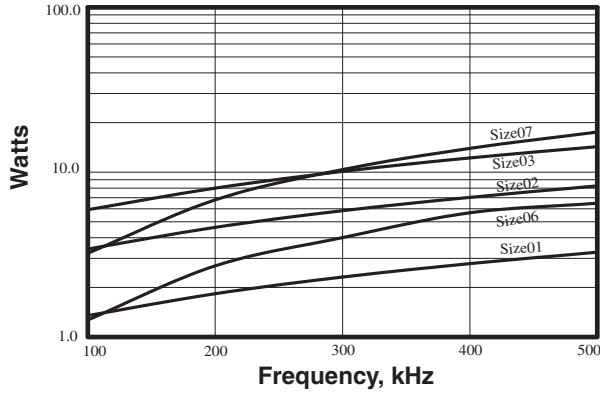


PACKAGING INFORMATION

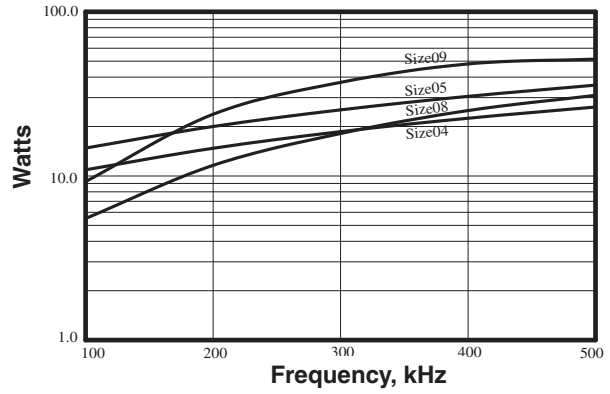
Parts packaged in pick and
place compatible bulk trays,
5 rows by 10 columns.
Total parts per tray = 50.

Performance Specifications

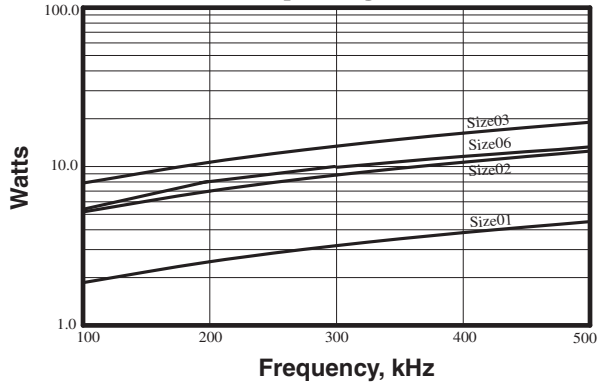
Unipolar (Flyback)
Power vs Frequency



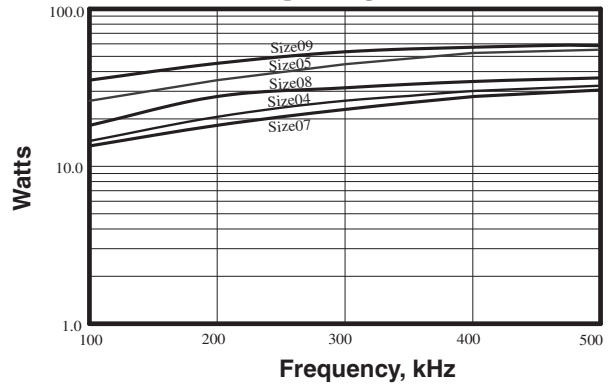
Unipolar (Flyback)
Power vs Frequency



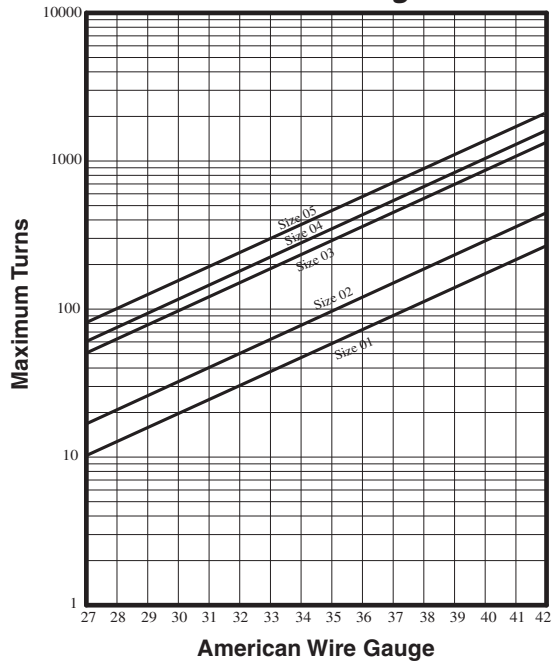
Bipolar (Push-Pull)
Power vs Frequency



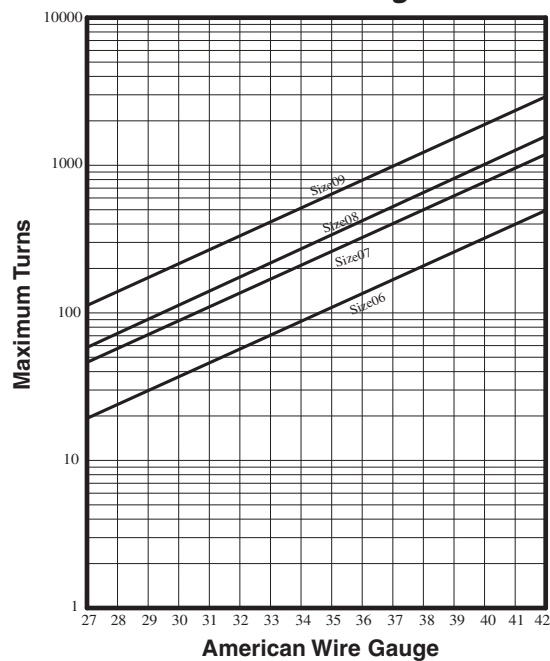
Bipolar (Push-Pull)
Power vs Frequency



Maximum Turns
vs American Wire Gauge



Maximum Turns
vs American Wire Gauge



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