

**TABLE 1** CHARACTERISTICS OF TECHNIQUES

Circuit type	Figure no.	Supply range (1-mA load)	Maximum output current at test voltage	Comments
Linear resonant Royer	1	2.7 to 12V	2 mA at 250V	Less than 100- $\mu$ V wideband noise, easily voltage controlled, potential dissipation issue at high supply voltages
Linear resonant Royer	4	2.7 to 32V	2 mA at 250V	Less than 100- $\mu$ V wideband noise, wide supply range, potential dissipation issue at high supply voltages
Switched resonant Royer	5	2.7 to 5V	3.5 mA at 250V	3-mV wideband noise, high output current, better efficiency than circuits in figures 1 and 4
Switched resonant Royer	8	2.7 to 15V	2 mA at 250V	Approximately 100- $\mu$ V wideband noise, good trade-off between figures 1, 4, and 5
Switched resonant Royer	11	4.5 to 15V	1.2 mA at – 1000V	1-mV wideband noise reducible to 100 $\mu$ V, –1000V output suits photomultiplier tubes
Push-pull	13	2.7 to 15V	2 mA at 300V	Approximately 100- $\mu$ V wideband noise
Push-pull	16	4.5 to 6V	2 mA at 0 to 300V	Full-range adjustable version of Figure 13, approximately 100- $\mu$ V wideband noise
Cascode-inductor flyback	17	3.5 to 30V	2 mA at 200V	Output-voltage limit of approximately 200V, approximately 1-mV wideband noise
Transformer flyback	20	2.7 to 20V	4 mA at 350V	300- $\mu$ V wideband noise, wide supply range, high output current, small transformer
Transformer flyback	22	3.8 to 12V	5 mA at 250V	1.5V noise, simple voltage-control input means a 0 to 3V input voltage and a 0V to 300V output voltage
Linear-transformer flyback	24	3.8 to 12V	5 mA at 250V	2-mV wideband noise, voltage-control input means a 0 to 3V input voltage and a 0V to 300V output voltage