Electrical Specifications (continued)

Parameter	Device	Symbol	Min	Typ	Max	Unit
Output Voltage Set-point ($V_{IN}=V_{IN,min}$, $I_O=I_{O,max}$, T_A=25°C)	All	$V_{O,set}$	-2.0	$V_{O,set}$	+2.0	% $V_{O,set}$
Output Voltage (Over all operating input voltage, resistive load, and temperature conditions until end of life)	All	$V_{O,set}$	-2.5%	—	+3.5%	% $V_{O,set}$
Adjustment Range Selected by an external resistor	All	V_O	0.7525		5.5	Vdc
Output Regulation						
Line ($V_{IN}=V_{IN,min}$ to $V_{IN,max}$)	All		—	0.3	—	% $V_{O,set}$
Load ($I_O=I_{O,min}$ to $I_{O,max}$)	All		—	0.4	—	% $V_{O,set}$
Temperature ($T_{ref}=T_{A,min}$ to $T_{A,max}$)	All		—	0.4	—	% $V_{O,set}$
Output Ripple and Noise on nominal output ($V_{IN}=V_{IN,nom}$ and $I_O=I_{O,min}$ to $I_{O,max}$ Cout = 1µF ceramic//10µFtantalum capacitors)						
RMS (5Hz to 20MHz bandwidth)	Vo ≤ 3.63		—	12	30	mV_{rms}
Peak-to-Peak (5Hz to 20MHz bandwidth)	Vo ≤ 3.63		—	30	75	mV_{pk-pk}
RMS (5Hz to 20MHz bandwidth)	V_o = 5.0V		—	25	40	mV_{rms}
Peak-to-Peak (5Hz to 20MHz bandwidth)	V_o = 5.0V		—	70	100	mV_{pk-pk}
External Capacitance						
ESR ≥ 1 mΩ	All	$C_{O,max}$	—	—	1000	µF
ESR ≥ 10 mΩ	All	$C_{O,max}$	—	—	5000	µF
Output Current	All	I_o	0		16	Adc
Output Current Limit Inception (Hiccup Mode) (V_O= 90% of $V_{O,set}$)	All	$I_{O,lim}$	—	180	—	% I_o
Output Short-Circuit Current (V_O≤250mV) (Hiccup Mode)	All	$I_{O,s/c}$	—	3	—	Adc
Efficiency	$V_{O,set}$ = 0.75Vdc	η		79.0		%
V_{IN}= $V_{IN,nom}$, T_A=25°C	$V_{O,set}$ = 1.2Vdc	η		85.0		%
$I_O=I_{O,max}$, V_O= $V_{O,set}$	$V_{O,set}$ = 1.5Vdc	η		87.0		%
	$V_{O,set}$ = 1.8Vdc	η		88.0		%
	$V_{O,set}$ = 2.5Vdc	η		90.5		%
	$V_{O,set}$ = 3.3Vdc	η		92.0		%
	$V_{O,set}$ = 5.0Vdc	η		94.0		%
Switching Frequency	All	f_{sw}	—	300	—	kHz
Dynamic Load Response						
(dIo/dt=2.5A/µs; V_{IN} = $V_{IN,nom}$; T_A=25°C) Load Change from Io= 50% to 100% of Io,max; 1µF ceramic// 10 µF tantalum Peak Deviation	All	V_{pk}	—	200	—	mV
Settling Time (Vo<10% peak deviation)	All	t_s	—	25	—	µs
(dIo/dt=2.5A/µs; V_{IN} = $V_{IN,nom}$; T_A=25°C) Load Change from Io= 100% to 50%of Io,max: 1µF ceramic// 10 µF tantalum Peak Deviation	All	V_{pk}	—	200	—	mV
Settling Time (Vo<10% peak deviation)	All	t_s	—	25	—	µs

Electrical Specifications (continued)

Parameter	Device	Symbol	Min	Typ	Max	Unit
Dynamic Load Response						
(dIo/dt=2.5A/µs; V V_{IN} = $V_{IN, nom}$; T_A=25°C)	All	V_{pk}	—	100	—	mV
Load Change from Io= 50% to 100% of Io,max; Co = 2x150 µF polymer capacitors						
Peak Deviation						
Settling Time (Vo<10% peak deviation)	All	t_s	—	50	—	µs
(dIo/dt=2.5A/µs; V_{IN} = $V_{IN, nom}$; T_A=25°C)	All	V_{pk}	—	100	—	mV
Load Change from Io= 100% to 50%of Io,max: Co = 2x150 µF polymer capacitors						
Peak Deviation						
Settling Time (Vo<10% peak deviation)	All	t_s	—	50	—	µs

General Specifications

Parameter	Min	Typ	Max	Unit
Calculated MTBF (I_O=$I_{O, max}$, T_A=25°C) Telecordia SR-332 Issue 1: Method 1 Case 3		9,230,550		Hours
Weight	—	5.6 (0.2)	—	g (oz.)