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	$V_{O, set}$	-3%	—	+3%	% $V_{O, set}$
Adjustment Range Selected by an external resistor	All	V_O	0.7525		3.63	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)	All		—	8	15	mV_{rms}
Peak-to-Peak (5Hz to 20MHz bandwidth)	All		—	25	50	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	$I_{O, s/c}$	—	3.5	—	Adc
Efficiency	$V_{O,set}$ = 0.75Vdc	η		82.0		%
V_{IN}= $V_{IN, nom}$, T_A=25°C	$V_{O, set}$ = 1.2Vdc	η		87.0		%
I_O=$I_{O, max}$, V_O= $V_{O,set}$	$V_{O,set}$ = 1.5Vdc	η		89.0		%
	$V_{O,set}$ = 1.8Vdc	η		90.0		%
	$V_{O,set}$ = 2.5Vdc	η		92.5		%
	$V_{O,set}$ = 3.3Vdc	η		95.0		%
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}	—	300	—	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}	—	300	—	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) Load Change from Io= 50% to 100% of Io,max; Co = 2x150 µF polymer capacitors Peak Deviation	All	V_{pk}	—	150	—	mV
Settling Time (Vo<10% peak deviation)	All	t_s	—	100	—	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: Co = 2x150 µF polymer capacitors Peak Deviation	All	V_{pk}	—	150	—	mV
Settling Time (Vo<10% peak deviation)	All	t_s	—	100	—	µs

General Specifications

Parameter	Min	Typ	Max	Unit
Calculated MTBF (I_O=$I_{O, max}$, T_A=25°C)		6,800,000		Hours
Weight	—	5.6 (0.2)	—	g (oz.)