

## Product Overview

### NCP347: Positive Overvoltage Protection Circuit with Internal Low $R_{on}$ NMOS FET and Status Flag

For complete documentation, see the data sheet.



The NCP347 is able to disconnect the systems from its output pin in case wrong input operating conditions are detected. The system is positive overvoltage protected up to +28 V. Due to this device using internal NMOS, no external device is necessary, reducing the system cost and the PCB area of the application board. The NCP347 is able to instantaneously disconnect the output from the input, due to integrated Low Ron Power NMOS (65 m $\Omega$ , if the input voltage exceeds the overvoltage threshold (5.63 or 5.9 or 7.2 V) or undervoltage threshold, of 2.95 V (UVLO). At powerup (EN(BAR) pin = low level), the Vout turns on 50 ms after the Vin exceeds the undervoltage threshold. The NCP347 provides a negative going flag (FLAG(BAR)) output, which alerts the system that a fault has occurred. In addition, the device has ESD-protected input (15 kV Air) when bypassed with a 1.0  $\mu$ F or larger capacitor.

## Features

- Overvoltage Protection up to 28 V
- On-Chip Low RDS(on) NMOS Transistor: 80 m
- Overvoltage Lockout (OVLO)
- Undervoltage Lockout (UVLO)
- Internal 50 ms Startup Delay
- Alert FLAG(BAR) Output
- Shutdown EN(BAR) Input
- Compliance to IEC61000-4-2 (Level 4), 8.0 kV (Contact), and 15 kV (Air)
- ESD Ratings: Machine Model = B, Human Body Model = 3
- This is a Pb-Free Device

For more features, see the data sheet

## Applications

- Cell Phones, Camera Phones, Digital Still Cameras, Personal Digital Applications, and MP3 Players

## Part Electrical Specifications

Product	Compliance	Status	$V_{CC}$ Min (V)	$V_{CC}$ Max (V)	$P_{(AV)}$ Max (W)	$V_{IT+}$ Typ (V)	$V_{IT}$ Typ (V)	$I_{DDH}$ Max ( $\mu$ A)	$T_A$ Min ( $^{\circ}$ C)	$T_A$ Max ( $^{\circ}$ C)	Package Type
NCP347MTAETBG	Pb-free	Active	1.2	28	0.44	5.63	2.95	250	-40	85	WDFN-10
	Halide free										
NCP347MTAFTBG	Pb-free	Active	1.2	28	0.44	5.63	2.95	250	-40	85	WDFN-10
	Halide free										
NCP347MTAHTBG	Pb-free	Active	1.2	28	0.44	5.63	2.95	250	-40	85	WDFN-10
	Halide free										

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Created on: 7/19/2019