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## A8724 Photoflash Capacitor Charger with Flexible Current Limit and 55 V Power DMOS Switch

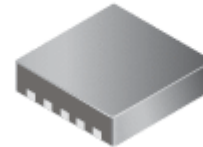
### Data sheet

- [Contact Allegro Marketing](#)

### Features

- Wide battery voltage range: 1.5 to 11 V
- Low quiescent current draw (1  $\mu$ A max in shutdown mode)
- Flexible current limit:
  - External resistor sets default current (0.7 to 1.5 A)
  - Optional single-wire current limit programming through CHARGE pin
- Rugged and compact design:
  - Integrated 55 V DMOS switch
  - ISET open/short protection
  - Open diode/secondary winding protection
  - 3 mm  $\times$  3 mm footprint
- Charge Complete indication
- Flexible IGBT driver with separate sink and source

Package: 10-contact MLP/TDFN (suffix EJ)



### Applications

- Digital and film camera flash
- Digital video camera flash

### Description

The A8724 provides a robust Xenon photoflash solution for a wide range of cameras. Its wide battery voltage specifications allow designers to use a common device for camera using 2 or 4 cell Alkaline batteries as well as 1 or 2 cell Lithium ion batteries. Its 55 V rated integrated power switch provides ample design margin, even for the 2 cell Lithium ion battery designs.

The A8724 features a flexible current limit scheme. The current limit is set by an external resistor at ISET, allowing designers to optimize the camera performance. The A8724 is protected against open circuit and short circuit condition on the ISET pin. Once the current limit is set, it can be optionally programmed as a percentage of the set current through a single wire interface, through the CHARGE pin.

The A8724 features an integrated flexible IGBT gate driver, with independent source and sink pins.

The A8724 is available in a 10-contact 3 mm  $\times$  3 mm MLP/ TDFN package. This small, low profile (0.75 mm) package is ideal for space-constrained applications. It is lead (Pb) free, with 100% matte-tin leadframe plating.

### Application Circuit

Complete Part Numbers							
Part Number	Package Type	RoHS Compliant	Part Composition/ RoHS Data	Temperature	Comments	Samples	Distributor Stock
A8724EEJTR-T	10-lead MLP	Yes	<a href="#">view data</a>	-40 °C to 85 °C	<i>new</i>	<a href="#">Contact Local Sales Representative</a> or check distributor stock	

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