

## LMS1585A 5A/LMS1587 5A and 3A Low Dropout Fast Response Regulators

Check for Samples: [LMS1585A](#) , [LMS1587](#)

### FEATURES

- Fast Transient Response
- Available in Adjustable, 1.5V, and 3.3V versions
- Current Limiting and Thermal Protection
- Commercial Temp. Range: 0°C to 125°C
- Industrial Temp. Range: -40°C to 125°C
- Line Regulation 0.005% (typical)
- Load Regulation 0.05% (typical)
- Direct Replacement for LT<sup>®</sup> 1585A/87

### APPLICATIONS

- Pentium<sup>®</sup> processor supplies
- PowerPC<sup>®</sup> supplies
- Other microprocessor supplies
- Low voltage logic supplies

### DESCRIPTION

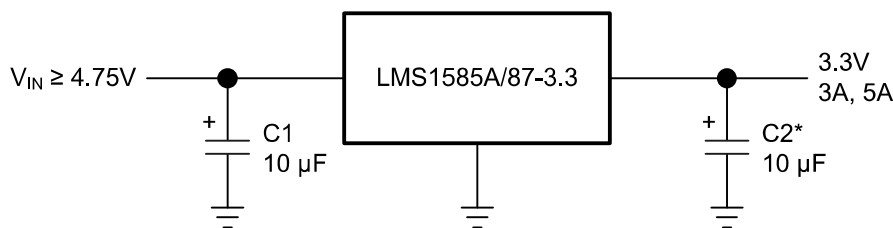
The LMS1585A and LMS1587 are low dropout positive regulators with output load current of 5A and 3A respectively. Their low dropout voltage (1.2V) and fast transient response make them an excellent solution for low voltage microprocessor applications.

The LMS1585A/87 are available in adjustable versions, which can set the output voltage with only two external resistors. In addition, they are also available in 1.5V and 3.3V fixed voltage versions<sup>(1)</sup>.

The LMS1585A/87 circuits include a zener trimmed bandgap reference, current limiting and thermal shutdown. The LMS1585A/87 series are available in KTT (TO-263) and NDE (TO-220) packages.

(1) Consult factory for other fixed voltage options.

### Typical Application



\* Required for Stability

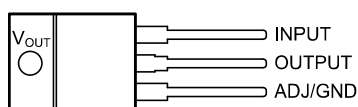


Figure 1. NDE (TO-220)  
(Top View)

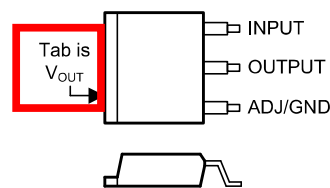

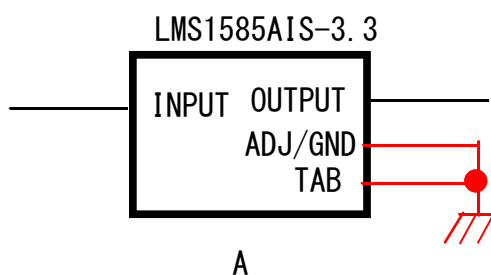


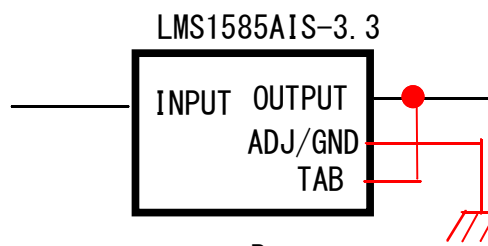
Figure 2. KTT (TO-263)  
(Top View)

- (Q1) Is the TAB terminal floating from the TMS1885A internal circuit?  
 (Q2) Is the TAB terminal a heat dissipation plate?  
 (Q3) Which connection is better (correct)?

  
 Power  
 Pentium  
 LT is  
 PROD  
 Produc  
 Instrum  
 necess



A



B