

LDO Selection Guide

| Part Number | Max. Input Voltage (V) | Output Voltage Options (V) | | | | | | | | Adjustable (Max. Output) (V) | Output Accuracy (%) | Max. V _{DROPOUT} @ I _{LOAD} | No Load Current (μA) | Reference Bypass | Shutdown Option | Standby Mode | Error Flag Output | Over Current Circuit Protection | Thermal Protection | Package |
|-------------|------------------------|----------------------------|-----|------|-----|-----|-----|-----|-----|------------------------------|---------------------|---|----------------------|------------------|-----------------|--------------|-------------------|---------------------------------|----------------------------------|---------|
| | | 2.5 | 2.7 | 2.85 | 3.0 | 3.3 | 3.6 | 4.0 | 5.0 | | | | | | | | | | | |
| IMP2014 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 70mV@50mA | 33 | • | • | | • | • | SOT-23A-5 | |
| IMP2015 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 160mV@100mA | 33 | • | • | | • | • | SOT-23A-5 | |
| IMP2054 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 70mV@50mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP2055 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 160mV@100mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP2070 | 6.5 | | | | | | | | 5.5 | | | 70mV@50mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP2071 | 6.5 | | | | | | | | 5.5 | | | 160mV@100mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP2185 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 250mV@150mA | 33 | • | | | • | • | SOT-23A-5 | |
| IMP2186 | 6.5 | • | • | • | • | • | • | • | | | 0.50 | 250mV@150mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP2187 | 6.5 | | | | | | | | 5.5 | | | 250mV@150mA | 33 | | • | | • | • | SOT-23A-5 | |
| IMP37 | 5.5 | • | | | • | • | | | | | 1 | 0.95V @ 0.8A | 36 | | | | • | • | 3-pin, SOT-223, 3-pin, TO-263 | |

LDO SelGd.at3

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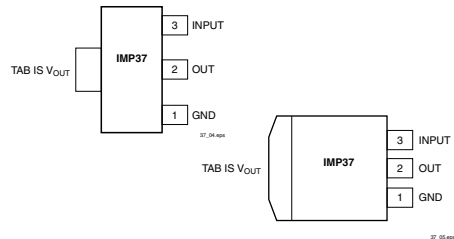
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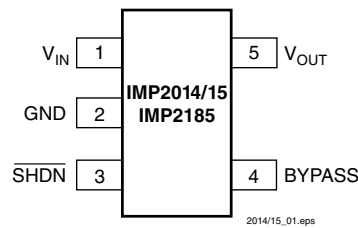
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IMP37



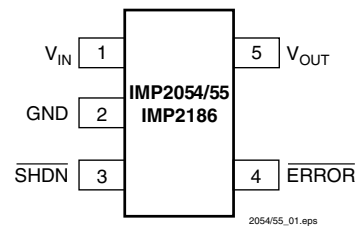
- ◆ **Low Dropout Voltage**
 - 0.8V maximum at 100mA
 - 0.95V maximum at 800mA
 - 20% lower dropout voltage than "1117" LDO regulators
- ◆ **Guaranteed Low Dropout Voltage at Multiple Current Levels**
- ◆ **1% Trimmed 2.5V, 3.0V and 3.3V Outputs**
- ◆ **Reduced Quiescent Current: 75µA Maximum**
- ◆ **Short Circuit and Thermal Protection**
- ◆ **Space Saving SOT-223 Surface Mount Package**
- ◆ **"1117" Pin Compatible**

IMP2014/15, IMP2185



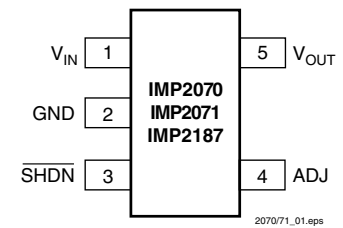
- ◆ **Pin Compatible with TelCom TC1014/1015/1185**
- ◆ **Lower Dropout Voltage for Long Battery Life**
 - IMP2014: 70mV vs. TelCom TC1014 120mV
 - IMP2015: 160mV vs. TelCom TC1015 250mV
 - IMP2185: 250mV vs. TelCom TC1185 400mV
- ◆ **Power Saving Shutdown Mode**
 - 0.2µA shutdown current
- ◆ **Superior Load Regulation**
 - 0.32%
- ◆ **Long Battery Life**
 - 33µA no load ground current
- ◆ **Accurate Output Voltage**
 - ± 2.5% over temperature
- ◆ **Low Drift Output: 40ppm/°C**
- ◆ **Guaranteed Minimum Output Current**
 - IMP2014: 60mA
 - IMP2015: 110mA
 - IMP2185: 160mA
- ◆ **Over-Current and Over-Temperature Protection**
- ◆ **Reference Bypass Input for Low-noise and Improved PSRR**
- ◆ **Compact SOT-23A-5 Package**

IMP2054/55, IMP2186



- ◆ **Pin Compatible with TelCom TC1054/1055/1186**
- ◆ **Lower Dropout Voltage for Long Battery Life**
 - IMP2054: 70mV vs. TelCom TC1054 120mV
 - IMP2055: 160mV vs. TelCom TC1055 250mV
 - IMP2186: 250mV vs. TelCom TC1186 400mV
- ◆ **Power Saving Shutdown Mode**
 - 0.2µA shutdown current
- ◆ **ERROR Output**
 - Low battery detection
 - Processor reset
- ◆ **Superior Load Regulation**
 - 0.32%
- ◆ **Long Battery Life**
 - 33µA no load ground current
- ◆ **Accurate Output Voltage**
 - ± 2.5% over temperature
- ◆ **Low Drift Output: 40ppm/°C**
- ◆ **Guaranteed Minimum Output Current**
 - IMP2054: 60mA
 - IMP2055: 110mA
 - IMP2186: 160mA
- ◆ **Over-Current and Over-Temperature Protection**
- ◆ **Compact SOT-23A-5 Package**

IMP2070/71, IMP2187



- ◆ **Pin Compatible with TelCom TC1070/1071/1187**
- ◆ **Lower Dropout Voltage For Long Battery Life**
 - IMP2070: 70mV vs. TelCom TC1070 120mV
 - IMP2071: 160mV vs. TelCom TC1071 250mV
 - IMP2187: 250mV vs. TelCom TC1187 400mV
- ◆ **Power Saving Shutdown Mode**
 - 0.2µA shutdown current
- ◆ **Adjustable Output Voltage**
- ◆ **Superior Load Regulation**
 - 0.32%
- ◆ **Long Battery Life**
 - 33µA no load ground current
- ◆ **Accurate Output Voltage**
 - ± 2.5% over temperature
- ◆ **Low Drift Output: 40ppm/°C**
- ◆ **Guaranteed Minimum Output Current**
 - IMP2070: 60mA
 - IMP2071: 110mA
 - IMP2187: 160mA
- ◆ **Over-Current and Over-Temperature Protection**
- ◆ **Compact SOT-23A-5 Package**