

**1.5 AMP POSITIVE STEP-DOWN  
INTEGRATED SWITCHING REGULATOR**

Revised 6/30/98

- Very Small Footprint
- High Efficiency > 85%
- Self-Contained Inductor
- Internal Short-Circuit Protection
- Over-Temperature Protection
- Fast Transient Response
- Wide Input Range

voltage, 3-terminal IntegXted Switching Regulators (ISRs).

**Standard Application**

**Pin-Out Information**

| Pin | Function         |
|-----|------------------|
| 1   | V <sub>in</sub>  |
| 2   | GND              |
| 3   | V <sub>out</sub> |

C1 = Optional 1µF ceramic  
C2 = Required 100µF electrolytic

**Ordering Information**

78ST1 **XX** **Y** C

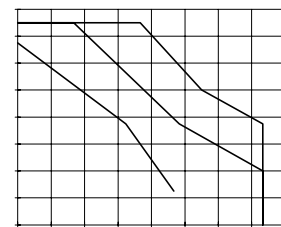
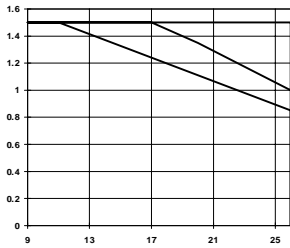
- 33 = 3.3 Volts
- 36 = 3.6 Volts
- 05 = 5.0 Volts
- 51 = 5.1 Volts
- 65 = 6.5 Volts
- 07 = 7.0 Volts
- 08 = 8.0 Volts
- 09 = 9.0 Volts
- 12 = 12.0 Volts

**Package Suffix**

- V = Vertical Mount
- S = Surface Mount
- H = Horizontal Mount



**CHARACTERISTIC DATA**



**PACKAGING INFORMATION**

| Orderable Device | Status<br>(1) | Package Type | Package<br>Drawing | Pins | Package Qty | Eco Plan<br>(2)   | Lead/Ball Finish | MSL Peak Temp<br>(3) | Samples<br>(Requires Login) |
|------------------|---------------|--------------|--------------------|------|-------------|-------------------|------------------|----------------------|-----------------------------|
| 78ST105HC        | LIFEBUY       | SIP MODULE   | EFA                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | N / A for Pkg Type   |                             |
| 78ST105SC        | LIFEBUY       | SIP MODULE   | EFC                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | Level-1-215C-UNLIM   |                             |
| 78ST105SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST105VC        | LIFEBUY       | SIP MODULE   | EFD                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | N / A for Pkg Type   |                             |
| 78ST107HC        | OBSOLETE      | SIP MODULE   | EFA                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST107SC        | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST107SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST107VC        | OBSOLETE      | SIP MODULE   | EFD                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST108HC        | OBSOLETE      | SIP MODULE   | EFA                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST108SC        | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST108SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST108VC        | OBSOLETE      | SIP MODULE   | EFD                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST109SC        | NRND          | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST109SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST109TC        | OBSOLETE      | SIP MODULE   | EFT                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST112HC        | LIFEBUY       | SIP MODULE   | EFA                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | N / A for Pkg Type   |                             |
| 78ST112SC        | LIFEBUY       | SIP MODULE   | EFC                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | Level-1-215C-UNLIM   |                             |
| 78ST112SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST112TC        | OBSOLETE      | SIP MODULE   | EFT                | 3    |             | TBD               | Call TI          | Call TI              |                             |
| 78ST112VC        | LIFEBUY       | SIP MODULE   | EFD                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | N / A for Pkg Type   |                             |
| 78ST133HC        | LIFEBUY       | SIP MODULE   | EFA                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | N / A for Pkg Type   |                             |
| 78ST133SC        | LIFEBUY       | SIP MODULE   | EFC                | 3    | 25          | Pb-Free<br>(RoHS) | Call TI          | Level-1-215C-UNLIM   |                             |
| 78ST133SCT       | OBSOLETE      | SIP MODULE   | EFC                | 3    |             | TBD               | Call TI          | Call TI              |                             |

| Orderable Device | Status<br>(1)      | Package Type | Package Drawing | Pins | Package Qty | Eco Plan<br>(2)               | Lead/Ball Finish     | MSL Peak Temp<br>(3) | Samples<br>(Requires Login) |
|------------------|--------------------|--------------|-----------------|------|-------------|-------------------------------|----------------------|----------------------|-----------------------------|
| 78ST133VC        | Pb-Free<br>LIFEBUY | SIP MODULE   | EFD             | 3    | 25          | Pb-Free<br>(RoHS)<br>N/A14201 | Call TI<br>10.544Pkg | N / A for Pkg Type   |                             |
| 78ST136SC        | OBSOLETE           | SIP MODULE   | EFC             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST136SCT       | OBSOLETE           | SIP MODULE   | EFC             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST136VC        | OBSOLETE           | SIP MODULE   | EFD             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST151HC        | OBSOLETE           | SIP MODULE   | EFA             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST151SC        | OBSOLETE           | SIP MODULE   | EFC             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST151SCT       | OBSOLETE           | SIP MODULE   | EFC             | 3    |             | TBD                           | Call TI              | Call TI              |                             |
| 78ST151VC        | OBSOLETE           | SIP MODULE   | EFD             | 3    |             | TBD                           | Call TI              | Call TI              |                             |



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