

isc Three Terminal Voltage Regulator

78H18

FEATURES

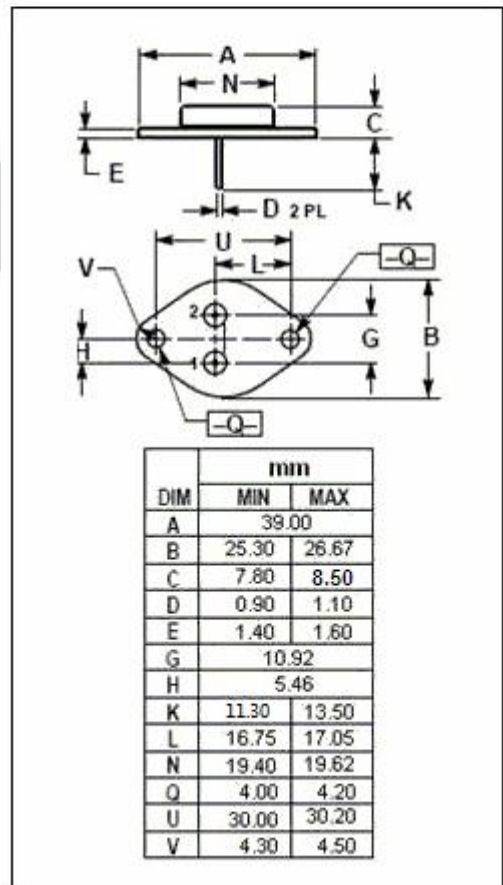
- Output voltage of 18V
- Internal thermal overload protection
- Output transition Safe-Area compensation

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | RATING | UNIT |
|------------------|--------------------------------|--------------------|------|
| V _i | DC input voltage | 35 | V |
| I _o | Output current | internally limited | |
| P _{tot} | Power dissipation | internally limited | |
| T _{OP} | Operating junction temperature | -55~150 | °C |
| T _{stg} | Storage temperature | -55~150 | °C |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|---|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 3 | °C/W |
| R _{th j-a} | Thermal Resistance, Junction to Ambient | 50 | °C/W |



isc Three Terminal Voltage Regulator**78H18****• ELECTRICAL CHARACTERISTICS** $T_j=25^\circ\text{C}$ ($V_i=26\text{V}$, $I_o=0.5\text{A}$, $C_i=0.33\ \mu\text{F}$, $C_o=0.1\ \mu\text{F}$ unless otherwise specified)

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------|--------------------------|--|------|-----|------|------|
| V_o | Output Voltage | $V_{in}=26\text{V}$; $I_o=0.5\text{A}$ | 17.3 | | 18.7 | V |
| ΔV_v | Line Regulation | $23\text{V} \leq V_{in} \leq 33\text{V}$; | | | 180 | mV |
| ΔV_i | Load Regulation | $5\text{mA} \leq I_o \leq 1.5\text{A}$; | | | 180 | mV |
| I_b | Quiescent Current | $V_{in}=26\text{V}$; $I_o=0.5\text{A}$ | | | 6 | mA |
| Δ_{b1} | Quiescent Current Change | $5.0\text{mA} \leq I_o \leq 1.0\text{A}$; | | | 0.5 | mA |
| Δ_{b2} | Quiescent Current Change | $22\text{V} \leq V_{in} \leq 33\text{V}$; | | | 0.8 | mA |