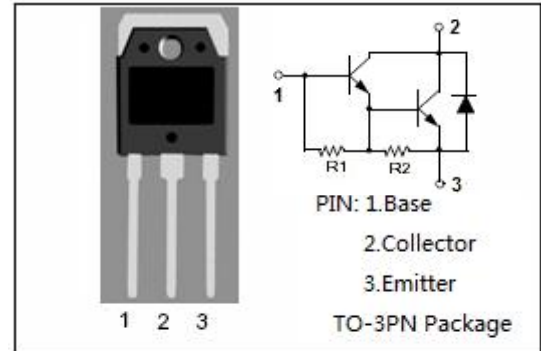


isc Silicon NPN Darlington Power Transistor
KT8232A1
DESCRIPTION

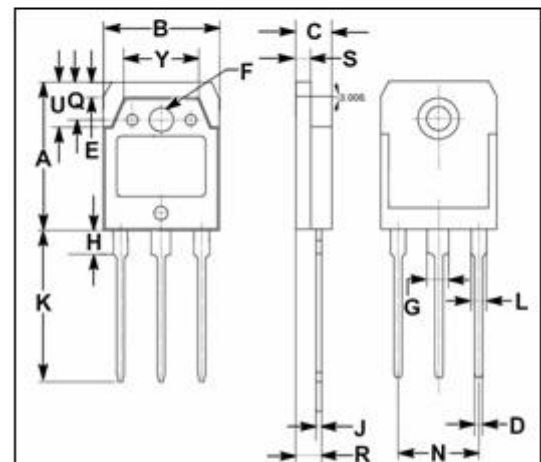
- Built In Clamping Zener
- High Operating Junction Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in automotive environment as electronic ignition power actuators.


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|---|---------|------|
| V _{CB0} | Collector-Base Voltage | 350 | V |
| V _{CEO} | Collector-Emitter Voltage | 350 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| I _c | Collector Current-Continuous | 20 | A |
| I _{CM} | Collector Current-Peak | 30 | A |
| I _B | Base Current | 1 | A |
| I _{BM} | Base Current-Peak | 5 | A |
| P _C | Collector Power Dissipation @ T _c =25°C | 125 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -65~150 | °C |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 19.60 | 20.30 |
| B | 15.50 | 15.70 |
| C | 4.70 | 4.90 |
| D | 0.90 | 1.10 |
| E | 1.90 | 2.10 |
| F | 3.40 | 3.60 |
| G | 2.90 | 3.20 |
| H | 3.20 | 3.40 |
| J | 0.595 | 0.605 |
| K | 19.80 | 20.70 |
| L | 1.90 | 2.20 |
| N | 10.89 | 10.91 |
| Q | 4.90 | 5.10 |
| R | 3.35 | 3.45 |
| S | 1.995 | 2.100 |
| U | 5.90 | 6.20 |
| Y | 9.90 | 10.10 |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 1 | °C/W |

isc Silicon NPN Darlington Power Transistor**KT8232A1****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|------------------------|--------------------------------------|---|-----|------|------------|------|
| ☆V _{CEO(SUS)} | Collector-Emitter Sustaining Voltage | I _C = 30mA | 350 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 8A; I _B = 0.1A | | | 1.6 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 8A; I _B = 0.1A | | | 2 | V |
| I _{CEO} | Collector Cutoff Current | V _{CE} = 350V; I _B = 0 V _{CE} = 350V; I _B = 0; T _C =125°C | | | 0.1 0.5 | mA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 5V; I _C =0 | | | 10 | mA |
| h _{FE} | DC Current Gain | I _C = 5A; V _{CE} = 5V | 300 | | 2000 | |

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