

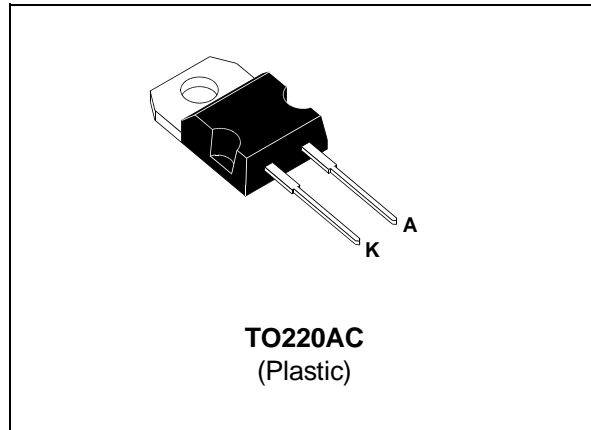


BY239L-800

RECTIFIER DIODES

MAIN PRODUCTS CHARACTERISTICS

| | |
|-------------|--------|
| $I_{F(av)}$ | 10 A |
| V_{RRM} | 800 V |
| $V_F(max)$ | 1.45 V |



- STANDARD RECTIFIER
- HIGH SURGE CURRENT CAPABILITY
- LOW FORWARD VOLTAGE DROP

ABSOLUTE MAXIMUM RATINGS (limiting values)

| Symbol | Parameter | | Value | Unit |
|--------------------|--|--------------------------|---------------|-------------|
| $I_{F(AV)}$ | Average forward current * | $T_c=100^{\circ}C$ | 10 | A |
| I_{FSM} | Surge non repetitive forward current | $t_p=10ms$ sinusoidal | 140 | A |
| P_{tot} | Power dissipation * | $T_c=100^{\circ}C$ | 12.5 | W |
| T_{stg} T_j | Storage and junction temperature range | | - 40 to + 125 | $^{\circ}C$ |

* Single phase, half wave, resistive or inductive load.

| Symbol | Parameter | Value | Unit |
|-----------|---------------------------------|-------|------|
| V_{RRM} | Repetitive peak reverse voltage | 800 | V |

THERMAL RESISTANCE

| Symbol | Parameter | Value | Unit |
|---------------|------------------|-------|---------------|
| $R_{th(j-c)}$ | Junction to case | 2 | $^{\circ}C/W$ |

ELECTRICAL CHARACTERISTICS

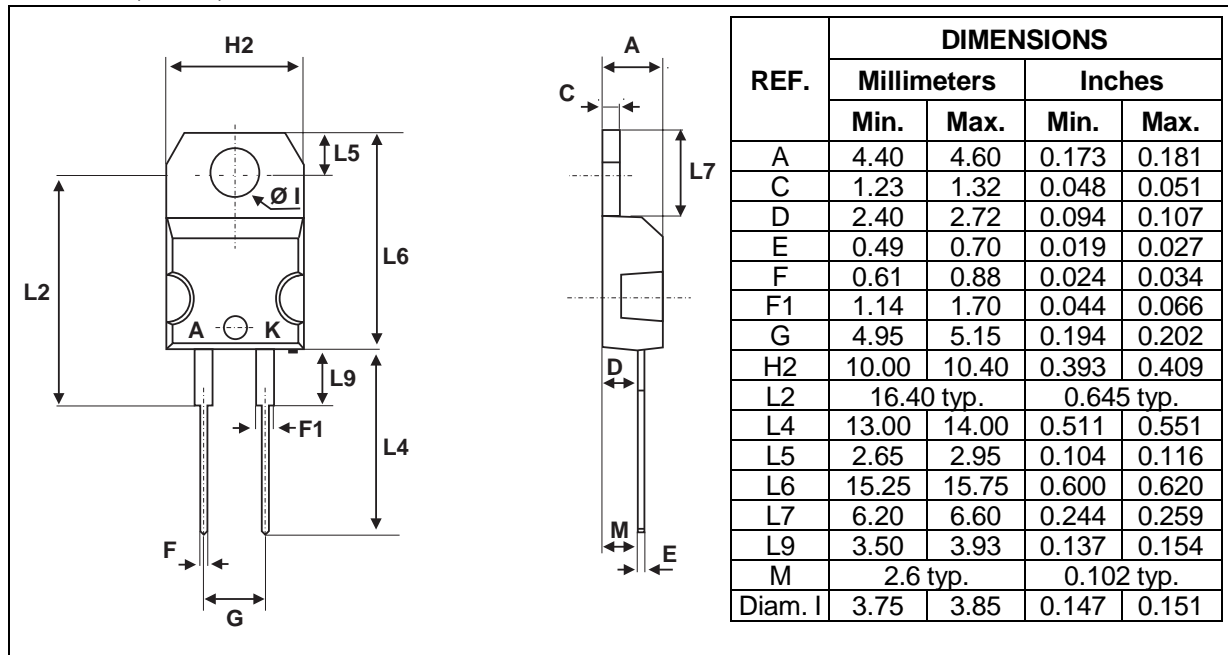
| Symbol | Test Conditions | | Min. | Typ. | Max. | Unit |
|----------|----------------------|-----------------|------|------|------|---------|
| V_F * | $T_j = 25^{\circ}C$ | $I_F = 30 A$ | | | 1.45 | V |
| I_R ** | $T_j = 125^{\circ}C$ | $V_R = V_{RRM}$ | | | 500 | μA |

Pulse test : * $t_p = 380 \mu s$, duty cycle < 2 %

** $t_p = 5 ms$, duty cycle < 2 %

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PACKAGE MECHANICAL DATA TO220AC (Plastic)



Cooling method : C
Marking : Type number
Weight : 1.86 g

Recommended torque value : 0.8m.N
Maximum torque value : 1.0m.N

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