

TECHNICAL DATA  
DATA SHEET 2030, REV. -

## HERMETIC ULTRAFAST RECOVERY RECTIFIER

**DESCRIPTION:** A 400 VOLT, 30 AMP, 50 NANOSECOND, RECTIFIER IN A HERMETIC TO-254 PACKAGE.

### MAXIMUM RATINGS

ALL RATINGS ARE AT  $T_A = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (per leg)	PIV	400	Volts
MAXIMUM DC OUTPUT CURRENT ( $T_C = 100^\circ\text{C}$ )	$I_O$	30	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec.	$I_{FSM}$	150	Amps
MAXIMUM THERMAL RESISTANCE	$R_{\theta JC}$	1.8	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	-	-55 to +150	$^\circ\text{C}$

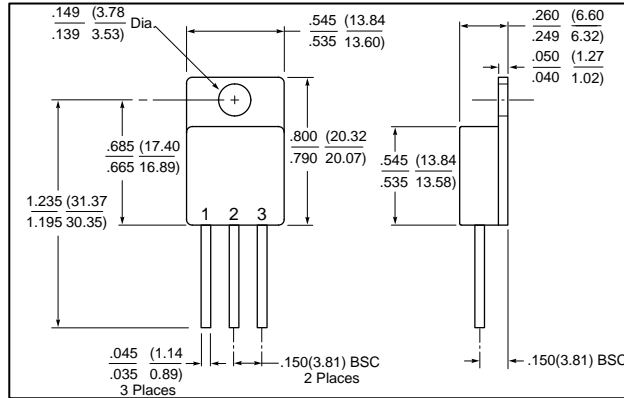
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (per leg) Common Cathode (P) Pulse width $\leq 300 \mu\text{s}$ , duty cycle $\leq 2\%$  $I_F = 12\text{A}, T_A = 25^\circ\text{C}$ $I_F = 12\text{A}, T_A = 100^\circ\text{C}$	$V_f$	1.35 1.15	Volts
MAXIMUM FORWARD VOLTAGE DROP (per leg) Common Anode (N) and Doubler (D) Pulse width $\leq 300 \mu\text{s}$ , duty cycle $\leq 2\%$  $I_F = 12\text{A}, T_A = 25^\circ\text{C}$ $I_F = 12\text{A}, T_A = 100^\circ\text{C}$	$V_f$	1.45 1.25	Volts
MAXIMUM REVERSE CURRENT $I_r$ @ PIV (PER LEG)  $T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$	$I_r$	10 1.0	$\mu\text{A}$ mA
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5\text{A}, I_r = 1.0\text{A}, I_{rr} = 0.25\text{A}$ )	$t_{rr}$	50	nsec

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**MECHANICAL DIMENSIONS: In Inches / mm**



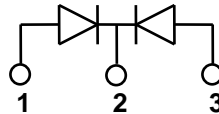
**TO-254**

**PINOUT TABLE**

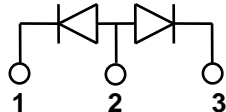
TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DOUBLER (D)	CATHODE	CATHODE/ANODE	ANODE

**SCHEMATICS**

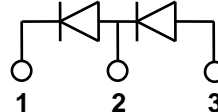
**COMMON CATHODE**



**COMMON ANODE**



**DOUBLER**



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