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 °C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (per leg)	PIV	400	Volts
MAXIMUM DC OUTPUT CURRENT (T_C = 100 °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	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	-	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC		SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (per leg) Common Cathode (P) Pulse width ≤ 300 μs, duty cycle ≤ 2%		V_f		Volts
	I_F = 12A, T_A = 25 C°		1.35	
	I_F = 12A, T_A = 100 C°		1.15	
MAXIMUM FORWARD VOLTAGE DROP (per leg) Common Anode (N) and Doubler (D) Pulse width ≤ 300 μs, duty cycle ≤ 2%		V_f		Volts
	I_F = 12A, T_A = 25 C°		1.45	
	I_F = 12A, T_A = 100 C°		125	
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG)	T_A = 25 C°	I_r	10	μA
	T_A = 150 C°		1.0	mA
MAXIMUM REVERSE RECOVERY TIME (I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A)		t_{rr}	50	nsec

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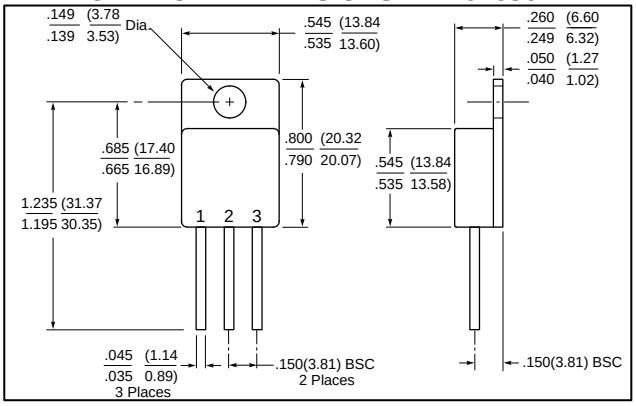
MECHANICAL DIMENSIONS: In Inches / mm



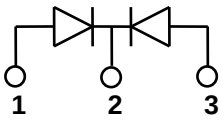
TO-254

PINOUT TABLE

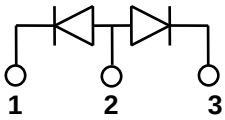
TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DOUBLER (D)	CATHODE	CATHODE/ANODE	ANODE

SCHEMATICS

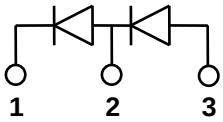
COMMON CATHODE



COMMON ANODE



DOUBLER



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