

TECHNICAL DATA  
DATA SHEET 4227, REV. C

**HERMETIC ULTRAFAST RECTIFIER**  
SINGLE / DUAL - COM. CATHODE / COM. ANODE / DOUBLER

**DESCRIPTION:** 200 VOLT, 20 AMP, 35 NANOSECOND HERMETIC RECTIFIERS IN TO-254 PACKAGE.  
**Ceramic Seal Option** – For ceramic seals use part number prefix SHDC

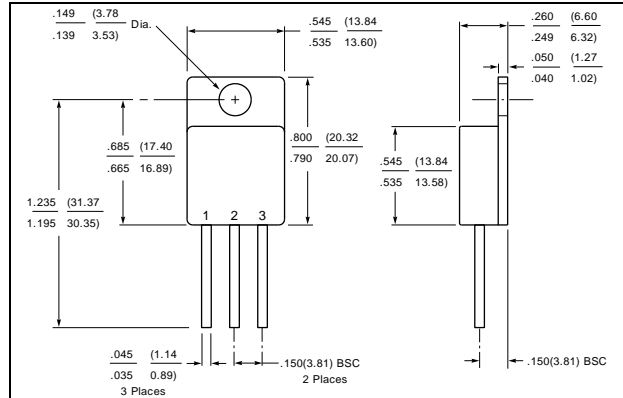
**MAX RATINGS/ELECTRICAL CHARACTERISTIC** ALL RATINGS ARE AT  $T_A = 25\text{ C}$  UNLESS OTHERWISE SPECIFIED

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	200	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 25^\circ\text{C}$ (PER LEG) SINGLE / COMMON CATHODE (P) $I_f = 10\text{ Amps}$ $I_f = 16\text{ Amps}$ $I_f = 20\text{ Amps}$	$V_f$	1.0 1.1 1.2	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 25^\circ\text{C}$ (PER LEG) COMMON ANODE (N) / DOUBLER (D) $I_f = 10\text{ Amps}$ $I_f = 16\text{ Amps}$ $I_f = 20\text{ Amps}$	$V_f$	1.1 1.2 1.3	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 125^\circ\text{C}$ (PER LEG) SINGLE / COMMON CATHODE (P) COMMON ANODE (N) / DOUBLER (D) $I_f = 16\text{ Amps}$	$V_f$	1.0 1.1	Volts
MAXIMUM DC OUTPUT CURRENT ( $T_C = 100^\circ\text{C}$ )	$I_O$	20	Amps
PEAK SINGLE CYCLE SURGE CURRENT (PER LEG) $t_p = 8.3\text{ msec}$	$I_{FSM}$	200	Amps
MAXIMUM REVERSE RECOVERY TIME (PER LEG) @ $I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$	$t_{rr}$	35	nsec
MAXIMUM REVERSE CURRENT $I_{rr}$ @ PIV (PER LEG) @ $T_A = 25^\circ\text{C}$	$I_{rr}$	10	$\mu\text{A}$
MAXIMUM REVERSE CURRENT $I_{rr}$ @ PIV (PER LEG) @ $T_A = 125^\circ\text{C}$	$I_{rr}$	1.0	mA
MAXIMUM JUNCTION CAPACITANCE(PER LEG) @ $V_R = 10\text{V}$ , $f = 1\text{MHz}$	$C_J$	150	pF
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R\theta_{JC}$	2.0	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_{op/stg}$	-55 to +150	$^\circ\text{C}$

# SENSITRON

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### MECHANICAL DIMENSIONS: In Inches / mm



### TO-254

### PINOUT TABLE

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

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