

TECHNICAL DATA
DATA SHEET 4983, REV. –

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

DESCRIPTION: 600 VOLT, 45AMP, 90 NS HERMETIC RECTIFIER IN A TO-259AA PACKAGE.

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

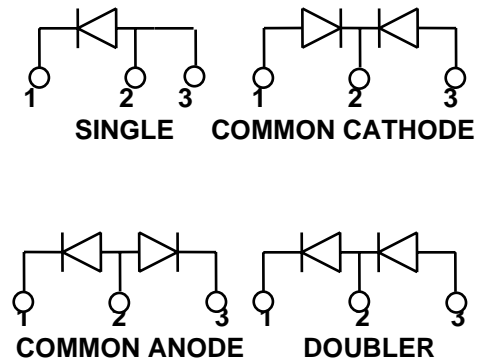
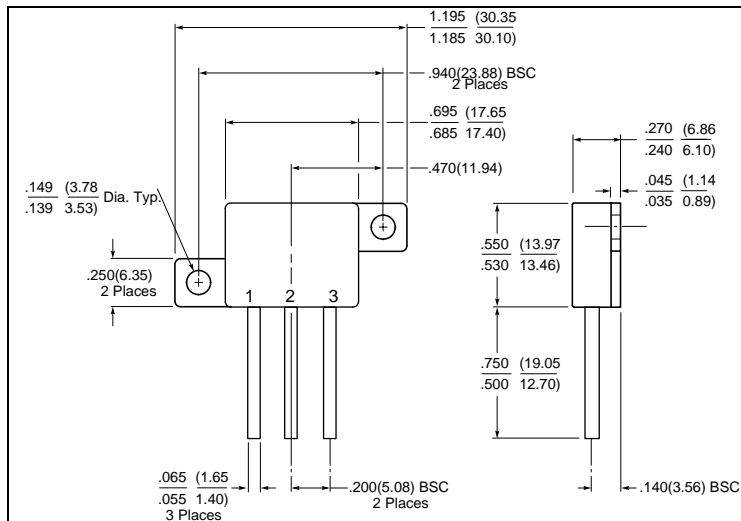
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	600	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 25^\circ\text{ C}$ (PER LEG) COMMON CATHODE (P) COMMON ANODE (N) / DOUBLER (D) ($I_f = 22\text{ Amps}$)	V_f	1.7 2.0	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 25^\circ\text{ C}$ (PER LEG) COMMON CATHODE (P) COMMON ANODE (N) / DOUBLER (D) ($I_f = 45\text{ Amps}$)	V_f	2.0 2.3	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 125^\circ\text{ C}$ (PER LEG) COMMON CATHODE (P) COMMON ANODE (N) / DOUBLER (D) ($I_f = 22\text{ Amps}$)	V_f	1.5 1.8	Volts
MAXIMUM DC OUTPUT CURRENT PER PACKAGE ($T_C = 100^\circ\text{ C}$)	I_o	45	Amps
PEAK SINGLE CYCLE SURGE CURRENT PER LEG $t_p = 8.3\text{ msec}$	I_{FSM}	225	Amps
MAXIMUM REVERSE RECOVERY TIME $I_f = 22\text{A}$, $di/dt = 200\text{A}/\mu\text{s}$, $V_R = 200\text{V}$	t_{rr}	90	nsec
MAXIMUM REVERSE RECOVERY CURRENT $I_f = 22\text{A}$, $di/dt = 200\text{A}/\mu\text{s}$, $V_R = 200\text{V}$	I_{RM}	9	A
MAXIMUM REVERSE RECOVERY CHARGE $I_f = 22\text{A}$, $di/dt = 200\text{A}/\mu\text{s}$, $V_R = 200\text{V}$	Q_{RR}	405	nC
MAXIMUM REVERSE CURRENT I_{rr} @ 600V (PER LEG) @ $T_A = 25^\circ\text{ C}$	I_{rr}	10	μA
MAXIMUM REVERSE CURRENT I_{rr} @ 480V (PER LEG) @ $T_A = 125^\circ\text{ C}$	I_{rr}	1	mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	1.2	$^\circ\text{C}/\text{W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_{op/stg}$	-65 to +150	$^\circ\text{C}$

SENSITRON SEMICONDUCTOR

SHD307901P
SHD307901N
SHD307901D

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MECHANICAL DIMENSIONS: In Inches / mm



TO-259

PINOUT TABLE

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
DOUBLER (D)	ANODE	ANODE/CATHODE	CATHODE

Ordering options:

For ceramic eyelets, please order SHDC307901x.

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