TECHNICAL DATA DATA SHEET 5554, REV -

# 10A, 200V HYPERFAST RECOVERY RECTIFIER

- Ultra-fast reverse recovery: 30ns
- Hermetically sealed power package
- MIL-PRF-19500 screening and QCI available (see part ordering information)

### **ELECTRICAL CHARACTERISTICS:**

All ratings are at  $T_A = 25$ °C unless otherwise specified.

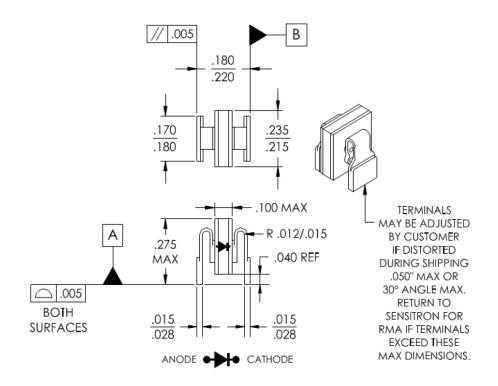
RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Working Peak Reverse Voltage (V <sub>RWM</sub> )	I <sub>R</sub> = 100 μA	210	-	-	V
Average Rectified Output Current (I <sub>o</sub> )	$T_C = 100^{\circ}C$	-	-	10	А
Surge Peak Forward Current (I <sub>FSM</sub> ) @ T <sub>A</sub> =25°C	$t_p$ = 8.3 ms, Half Sine Wave, superimposed on rated $I_o$	-	-	350	А
Thermal Resistance (R <sub>eJC</sub> )		-	-	4.5	°C/W
Junction Temperature (T <sub>J</sub> )	-	-65	-	+175	°C
Storage Temp. (T <sub>stg</sub> )	-	-65	-	+175	°C

CHARACTERISTIC		CONDITIONS	MIN	TYP	MAX	UNIT
Maximum Forward Voltag	ge (V <sub>F1</sub> )	I <sub>F</sub> = 6.0A	-	-	0.90	V
	(V <sub>F2</sub> )	I <sub>F</sub> = 10.0A			0.95	
	(V <sub>F3</sub> )	I <sub>F</sub> = 20.0A			1.05	
	(V <sub>F4</sub> )	$I_F = 6.0A, T_A = 125^{\circ}C$			0.85	
	(V <sub>F5</sub> )	$I_F = 6.0A, T_A = 150^{\circ}C$			0.78	
	$(V_{F6})$	I <sub>F</sub> = 6.0A, T <sub>A</sub> = -55°C			1.05	
Maximum Reverse	$(I_{R1})$	T <sub>A</sub> = 25° C	-	-	1	μA
Leakage Current I <sub>RM</sub>	$(I_{R2})$	T <sub>A</sub> = 125° C			100	
@ V <sub>RWM</sub>	$(I_{R3})$	T <sub>A</sub> = 150° C			500	
Breakdown Voltage	(BV <sub>R</sub> )	I <sub>R</sub> = 100μA	210	-	-	V
Junction Capacitance	(CJ)	V <sub>R</sub> = 10Vdc, f = 1MHz	-	-	105	pF
Reverse Recovery Tim	(t <sub>RR</sub> )	$I_F = 1A$ , $I_R = 1A$ , $I_{RR} = 0.1A$	-	-	30	ns

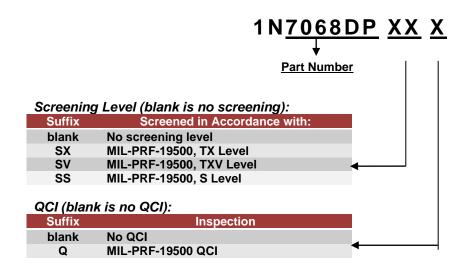
## SENSITRON SEMICONDUCTOR

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### **PACKAGE DIMENSIONS:**



#### PART ORDERING INFORMATION:



### SENSITRON SEMICONDUCTOR

1N7068DP
HERMETIC HYPERFAST
RECOVERY RECTIFIER

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