

1N6659  
1N6659R

**SENSITRON**  
**SEMICONDUCTOR**

JAN  
JANTX  
JANTXV

TECHNICAL DATA  
DATA SHEET 186, REV. A

## HERMETIC ULTRAFAST RECOVERY RECTIFIER

**DESCRIPTION:** 200 VOLT, 30 AMP, 35 NANOSECOND, HERMETIC RECTIFIER IN A TO-254 PACKAGE.

### MAX RATINGS/ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	200	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ( $I_F = 20$ Amps)	$V_f$	1.2	Volts
$I_F = 10\text{A}, T_A = 25^\circ\text{C}$		1.0	
$I_F = 10\text{A}, T_A = 125^\circ\text{C}$		0.83	
MAXIMUM DC OUTPUT CURRENT ( $T_C = 100^\circ\text{C}$ )	$I_o$	30	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec.	$I_{FSM}$	300	Amps
MAXIMUM REVERSE RECOVERY TIME ( $I_R = 0.5\text{A}, I_F = 1.0\text{A}, I_{RR} = 0.25\text{A}$ )	$t_{rr}$	35	nsec
MAXIMUM REVERSE CURRENT $I_r$ @ PIV (PER LEG)	$I_r$	10	$\mu\text{A}$
		1.0	mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	2.3	$^\circ\text{C}/\text{W}$
MAXIMUM OPERATING TEMPERATURE RANGE	-	-65 to +200	$^\circ\text{C}$
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{MHz}$ $V_{SIG} = 50\text{mV (p-p) (Max)}$	$C_J$	150	pF

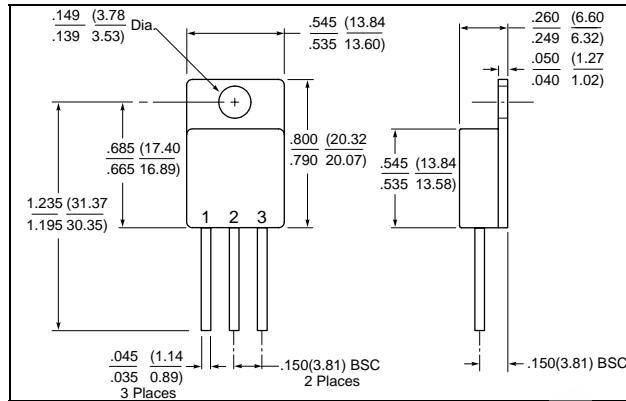
\* Suffix R denotes common anode version.

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**MECHANICAL DIMENSIONS: In Inches / mm**



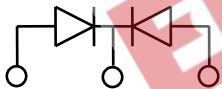
**TO-254**

**PINOUT TABLE**

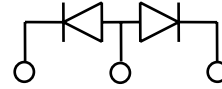
TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (R)	CATHODE 1	COMMON ANODE	CATHODE 2

**SCHEMATIC**

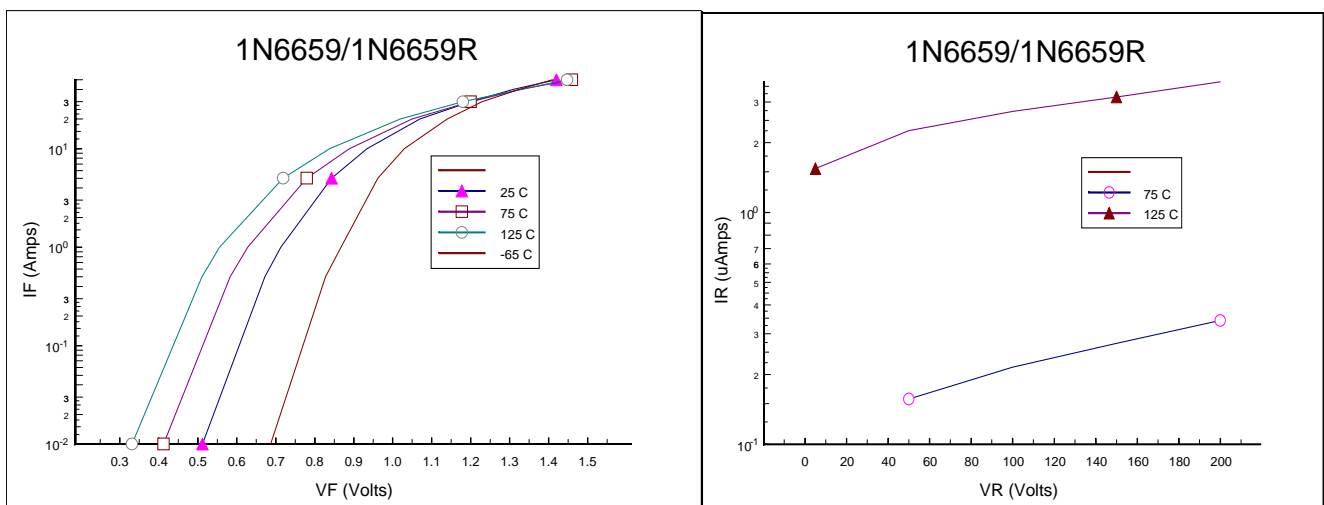
**COMMON CATHODE**



**COMMON ANODE**



**CHARACTERISTICS CURVES**



# **SENSITRON**

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## **SEMICONDUCTOR**

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### **TECHNICAL DATA**

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