

**1N3659 thru 1N3663 (SILICON)**



(DO-21)

Low-cost silicon rectifiers in hermetically sealed, press-fit case, designed for operation under severe environmental conditions. Cathode connected to case, but available with reverse polarity by adding suffix "R" to type number.

**MAXIMUM RATINGS** ( $T_C = 25^\circ\text{C}$  unless otherwise noted)

Rating	Symbol	1N3659 1N3659R	1N3660 1N3660R	1N3661 1N3661R	1N3662 1N3662R	1N3663 1N3663R	Units	
Peak Repetitive Reverse Voltage DC Blocking Voltage	$V_{RM(rep)}$ $V_R$	50	100	200	300	400	Volts	
RMS Reverse Voltage	$V_R$	35	70	140	210	280	Volts	
Average Half-Wave Rectified Forward Current with Resistive Load @ 100°C case @ 150°C case	$I_O$						30 25	Amp Amp
Peak One Cycle Surge Current (150°C case temp, 60 Hz)	$I_{FM(surge)}$	400						Amp
Operating Junction Temperature	$T_J$	-65 to +175						°C
Storage Temperature	$T_{stg}$	-65 to +200						°C

**ELECTRICAL CHARACTERISTICS**

Characteristic	Symbol	1N3659 1N3659R	1N3660 1N3660R	1N3661 1N3661R	1N3662 1N3662R	1N3663 1N3663R	Unit	
Maximum Forward Voltage at 25 Amp DC Forward Current	$V_F$	1.2	1.2	1.2	1.2	1.2	Volts	
Maximum Full Cycle Average Forward Voltage Drop @ Rated PIV and Current	$V_{F(AV)}$	0.7	0.7	0.7	0.7	0.7	Volts	
Maximum Full Cycle Average Reverse Current @ Rated PIV and Current (as half-wave rectifier, resistive load, 150°C)	$I_{R(AV)}$	5.0	4.5	4.0	3.5	3.0	mA	
Thermal Resistance	$\theta_{JC}$	1.0						°C/w

