

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Parameter	Symbol	1N4863	1N4864	Unit
Peak inverse voltage	PIV	70	125	V
Peak working reverse voltage	$V_{RWM}$	50	80	V
Average forward rectified current	$I_O$	200		mA
Forward steady state current	$I_F$	250		mA
Recurrent peak forward current	$I_{FM}$	600		mA
Peak forward surge current (1.0 $\mu$ s)	$I_{FSM}$	4000		mA
Power dissipation	$P_D$	500		mW
Operating and storage junction temperature range	$T_J, T_{stg}$	-65 to +200		$^{\circ}$ C

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^{\circ}$ C unless otherwise specified)

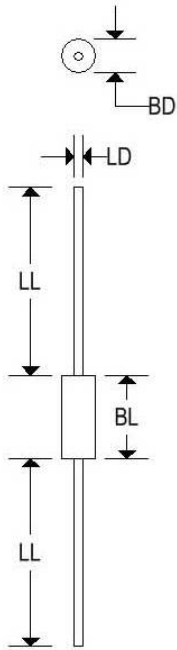
Characteristic	Symbol	Test Condition	1N4863		1N4864		Unit
			Min	Max	Min	Max	
Breakdown voltage	$B_{VR}$	$I_R = 5.0\mu A$	70	-	-	-	V
Breakdown voltage	$B_{VR}$	$I_R = 100\mu A$	-	-	125	-	V
Reverse current	$I_R$	$V_R = 50V$	-	50	-	-	nA
Reverse current	$I_R$	$V_R = 50V, T_A = 150^{\circ}C$	-	50	-	-	$\mu A$
Reverse current	$I_R$	$V_R = 80V$	-	-	-	100	nA
Reverse current	$I_R$	$V_R = 80V, T_A = 150^{\circ}C$	-	-	-	100	$\mu A$
Forward voltage	$V_F$	$I_F = 0.1mA$	440	550	440	550	mV
Forward voltage	$V_F$	$I_F = 1.0mA$	560	680	560	680	mV
Forward voltage	$V_F$	$I_F = 10mA$	690	820	690	820	mV
Forward voltage	$V_F$	$I_F = 100mA$	830	1200	830	1100	mV
Capacitance	$C_T$	$V_R = 0V$	2.0		-	1.3	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10mA, Rec. to 1.0mA$	7.0		-	-	ns
Reverse recovery time	$t_{rr}$	$I_F = 10mA, V_R = 6.0V, R_L = 100\Omega, rec. to 1.0mA$	-		-	4.0	ns
Reverse recovery time	$t_{rr}$	$I_F = I_R = 100mA, Rec. to 10mA$	-		-	9.0	ns

# 1N4863-1N4864

## SWITCHING RECTIFIERS

### MECHANICAL CHARACTERISTICS

<b>Case:</b>	DO-35
<b>Marking:</b>	Body painted, alpha-numeric
<b>Polarity:</b>	Cathode band



	DO-35			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100