

1N4863-1N4864

SWITCHING RECTIFIERS

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 (1.0μs)	I _{FSM}	4000		mA
Power dissipation	P _D	500		mW
Operating and storage junction temperature range	T _J , T _{stg}	-65 to +200		°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

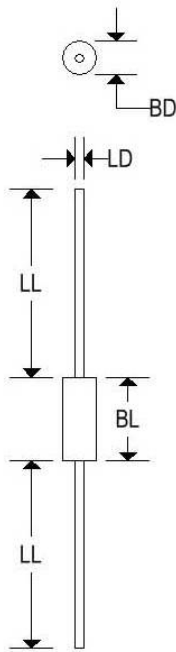
Characteristic	Symbol	Test Condition	1N4863		1N4864		Unit
			Min	Max	Min	Max	
Breakdown voltage	B _{VR}	I _R = 5.0μA	70	-	-	-	V
Breakdown voltage	B _{VR}	I _R = 100μA	-	-	125	-	V
Reverse current	I _R	V _R = 50V	-	50	-	-	nA
Reverse current	I _R	V _R = 50V, T _A = 150°C	-	50	-	-	μA
Reverse current	I _R	V _R = 80V	-	-	-	100	nA
Reverse current	I _R	V _R = 80V, T _A = 150°C	-	-	-	100	μA
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 = 100Ω, rec. to 1.0mA	-		-	4.0	ns
Reverse recovery time	t _{rr}	I _F = I _R = 100mA, Rec. to 10mA	-		-	9.0	ns

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MECHANICAL CHARACTERISTICS

Case:	DO-35
Marking:	Body painted, alpha-numeric
Polarity:	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