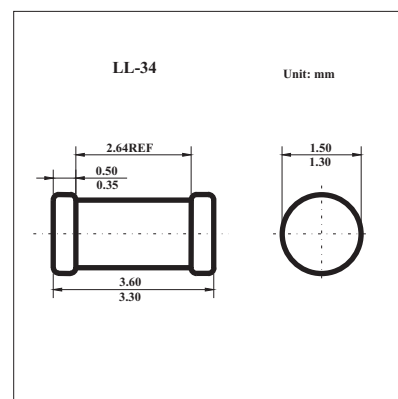


Fast Switching Surface Mount Diodes

KLL4448

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- General Purpose Rectification
- Silicon Epitaxial Planar Construction

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (*)	I_{FM}	500	mA
Average Rectified Output Current (*)	I_o	150	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu s$ @ $t = 1.0s$	I_{FSM}	2.0	A
		1.0	
Power Dissipation (*) Derate Above 25°C	P_D	500	mW
		1.68	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient Air (*)	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175	$^\circ\text{C}$

* Valid provided that device terminals are kept at ambient temperature.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Maximum Forward Voltage	V_{FM}	$I_F = 5.0\text{mA}$	0.62		0.72	V
		$I_F = 100\text{mA}$			1.0	
Maximum Peak Reverse Current	I_{RM}	$V_R = 75\text{V}$			5.0	μA
		$V_R = 70\text{V}, T_j = 150^\circ\text{C}$			50	
		$V_R = 20\text{V}, T_j = 150^\circ\text{C}$			30	
		$V_R = 20\text{V}$			25	nA
Capacitance	C_j	$V_R = 0, f = 1.0\text{MHz}$			4.0	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $V_R = 6.0\text{V}, R_L = 100 \Omega$			4.0	ns