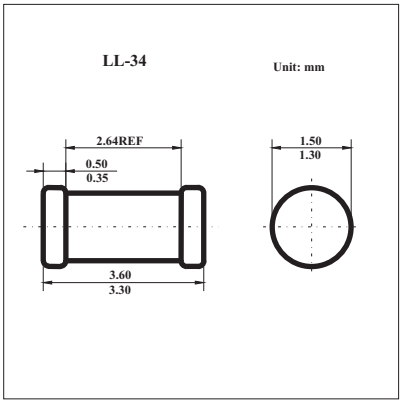
Fast Switching Surface Mount Diodes

KLL4148



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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

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

■ Electrical Characteristics Ta = 25℃

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