

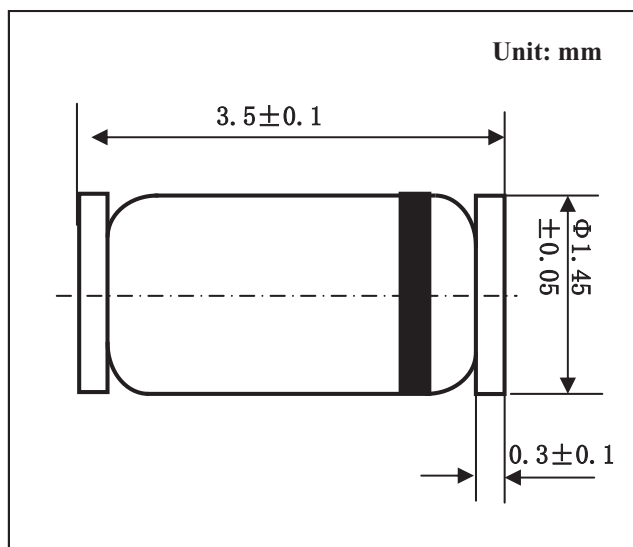
LL34 Small Signal Switching Diodes

FEATURES

- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High reliability
- Lead free in compliance with EU RoHS 2.0
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: LL34, glass case
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	LL4148	UNITS
Reverse voltage	V_R	75.0	V
Peak reverse voltage	V_{RM}	100.0	V
Average forward rectified current Half wave rectification with resistive load at $t_{amb}=25^{\circ}\text{C}$ and $f \geq 50\text{Hz}$	I_o	150.0	mA
Forward surge current at $t < 1\text{S}$ and $T_J=25^{\circ}\text{C}$	I_{FSM}	500.00	mA
Power dissipation at $t_{amb}=25^{\circ}\text{C}$	P_{tot}	500.0 ¹⁾	mW
Junction temperature	T_J	175.0	°C
Storage temperature range	T_{STG}	-55--- +175	°C

Parameter	Symbol	MIN	TYP	MAX	UNITS
Forward voltage @ $I_F=10\text{mA}$	V_F	-	-	1.0	V
Leakage current					
at $V_R=20\text{V}$	I_R	-	-	25.0	nA
at $V_R=75\text{V}$	I_R	-	-	5.0	μA
at $V_R=20\text{V}$ $T_J=150^{\circ}\text{C}$	I_R	-	-	50.0	μA
Capacitance at $V_F=V_R=0\text{V}$	C_{tot}	-	-	4.0	pF
Voltage rise when switching on tested with 50mA pulses $t_p=0.1 \mu\text{S}$, rise time $< 30\text{ns}$, $f_p=5$ to 100kHz	V_{fr}	-	-	2.5	V
Reverse recovery time from $I_F=10\text{mA}$ $V_R=6\text{V}$, $R_L=100 \Omega$, at $I_R=1\text{mA}$	t_{rr}	-	-	4.0	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			350.0 ¹⁾	K/W
Rectification efficiency at 100MHz , $V_{RF}=2\text{V}$	η_V	0.45	-	-	-

RATINGS AND CHARACTERISTIC CURVES

FIG1:-FORWARD Characteristics $\bar{a}^{\wedge}$

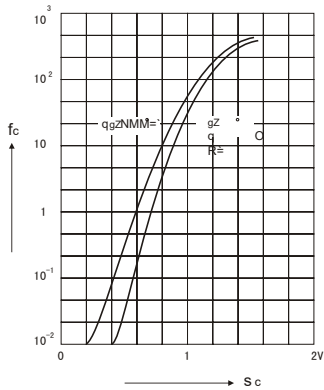


FIG 2:-DYNAMIC FORWARD RESISTANCEVERSUS FORWARD CURRENT

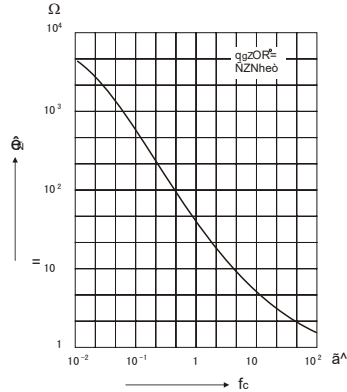


FIG.3: ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

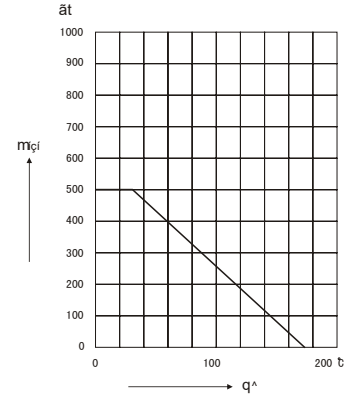


FIG.4-Reverse Capacitance versus voltage

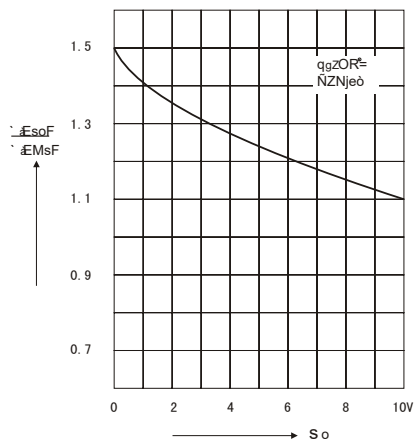


FIG.5 RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

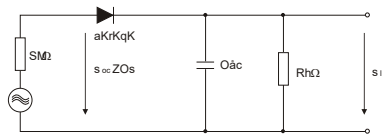


FIG 6: LEAKAGE CURRENT VERSU S JUNCTION TEMPERATURE

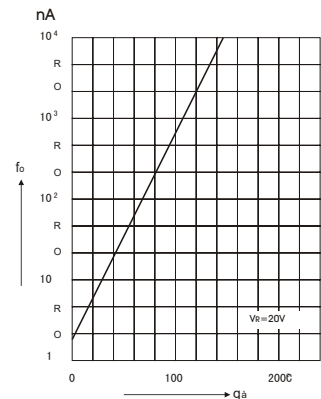


FIG 7: ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

