

LL42 LL43

Small Signal Schottky Diode

Features

- Fast Switching Speed and Low Turn-on Voltage
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)

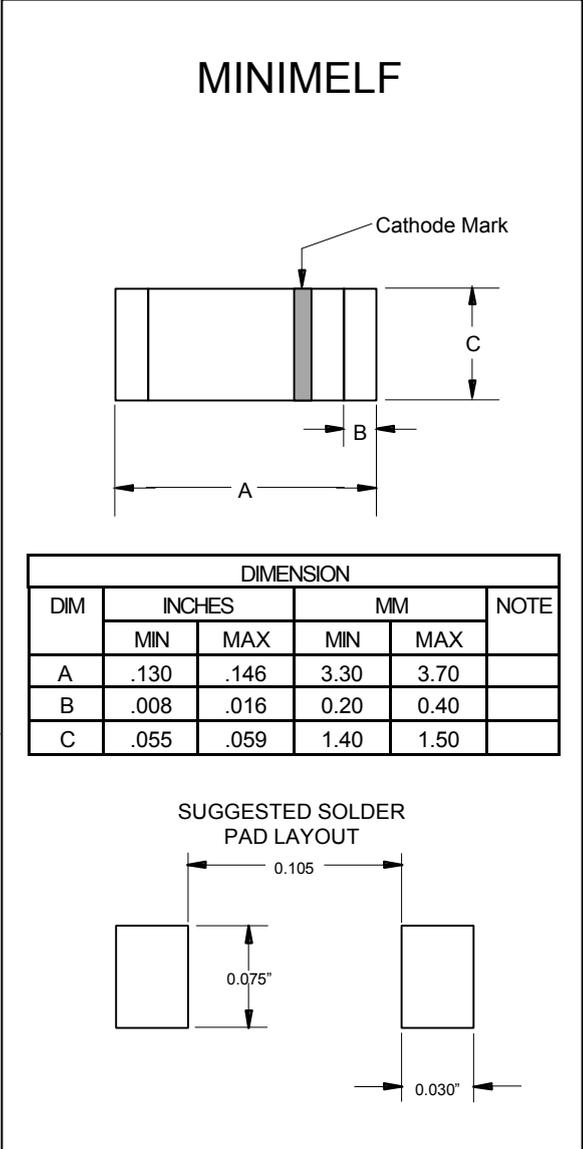
Mechanical Data

- Case: Minimelf, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.05 grams (approx.)

Maximum Ratings @ 25°C Unless Otherwise Specified

Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	V_{RRM}	30	V
Forward Continuous Current(Note2)	I_F	200	mA
Surge Forward Current @ $t_p < 10ms$, $T_A = 25^\circ C$	I_{FSM}	4.0	A
Power Dissipation(Note 2)	P_{tot}	200	mW
Thermal Resistance(Note 2)	$R_{\theta JA}$	250	K/W
Operation Temperature Range	T_A	-65 to 150	°C
Storage Temperature Range	T_{STG}	-65 to 150	°C

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.
 2. Valid provided that electrodes are kept at ambient temperature.

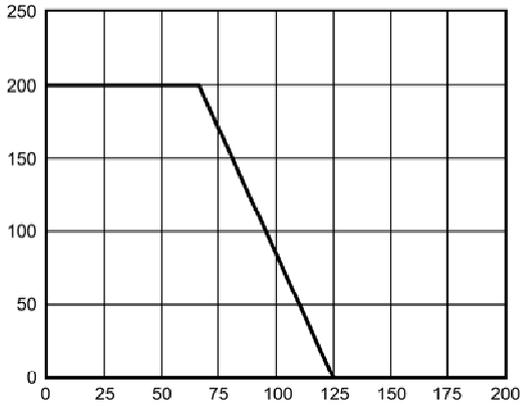


LL42, LL43

Maximum Ratings @ 25°C Unless Otherwise Specified

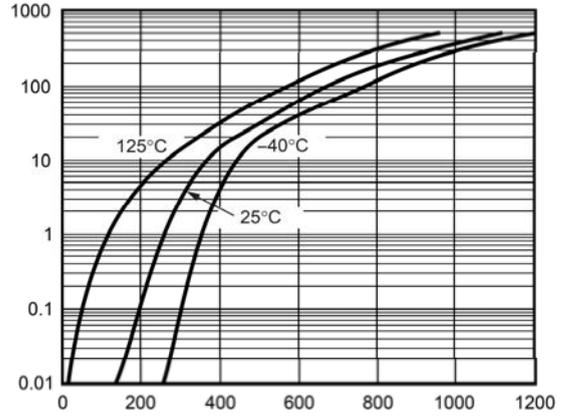
Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage			$V_{(BR)R}$	30			V
Forward voltage	$I_F=10\text{mA}$	LL42	V_F			0.4	V
	$I_F=200\text{mA}$	LL42	V_F			1.0	V
	$I_F=2\text{mA}$	LL43	V_F	0.26		0.33	V
	$I_F=15\text{mA}$	LL43	V_F			0.45	V
	$I_F=50\text{mA}$	LL43	V_F			0.65	V
	$I_F=200\text{mA}$	LL43	V_F			1.0	V
Reverse current	$V_R=25\text{V}$		I_R			0.5	μA
Pulse test $t_p < 300\mu\text{s}$, $\delta < 0.5$	$V_R=25\text{V}$, $T_j=100^\circ\text{C}$					100	
Capacitance	$V_R=1\text{V}$, $f=1\text{MHz}$		C_{tot}		7.0		pF
Reverse recovery time	$I_F=10\text{mA}$, $I_R=10\text{mA}$ $I_{rr}=1\text{mA}$, $R_L=100\Omega$		t_{rr}			5.0	ns

LL42, LL43



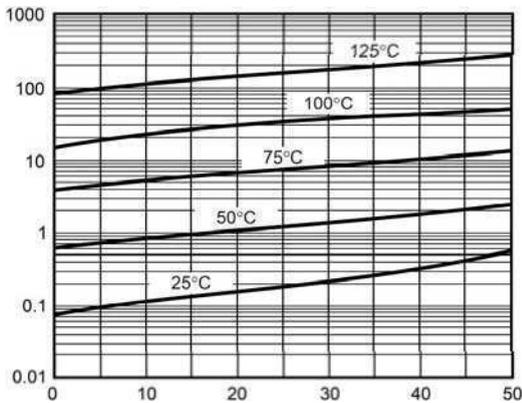
T_a – Ambient temperature (°C)

Figure 1. Admissible power dissipation vs. Ambient temperature



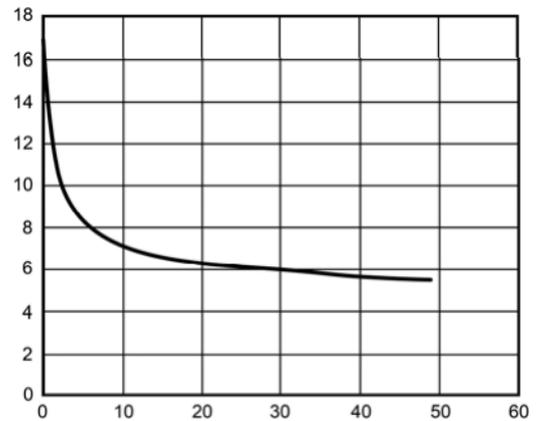
V_F – Instantaneous forward voltage (mV)

Figure 2. Typical reverse characteristics



V_R – Reverse voltage (V)

Figure 3. Typical reverse characteristics



V_R – Reverse voltage (V)

Figure 4. Typical capacitance vs. reverse applied voltage



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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