

Obsolete

M.C.C.

Micro Commercial Components



Micro Commercial Components  
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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

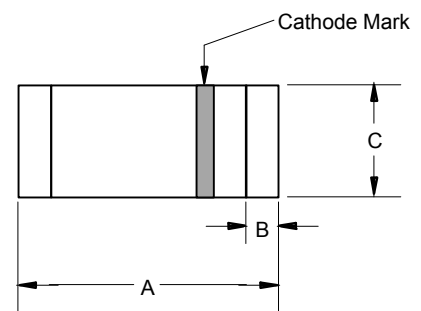
- Case: Minimelf, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.05 grams ( approx.)

### 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

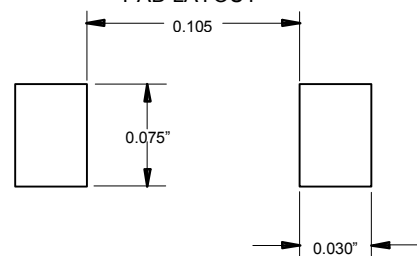
**Note:** 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.  
2. Valid provided that electrodes are kept at ambient temperature.

### MINIMELF



DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	

### SUGGESTED SOLDER PAD LAYOUT

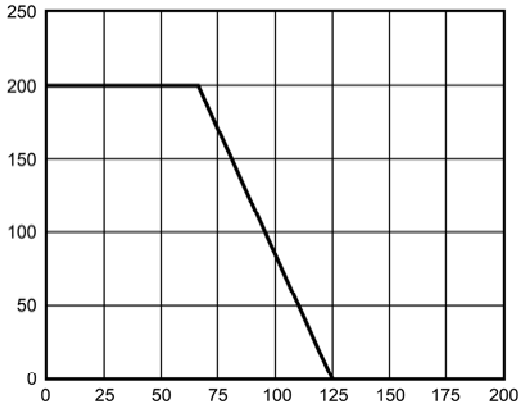


# LL42, LL43

## Maximum Ratings @ 25°C Unless Otherwise Specified

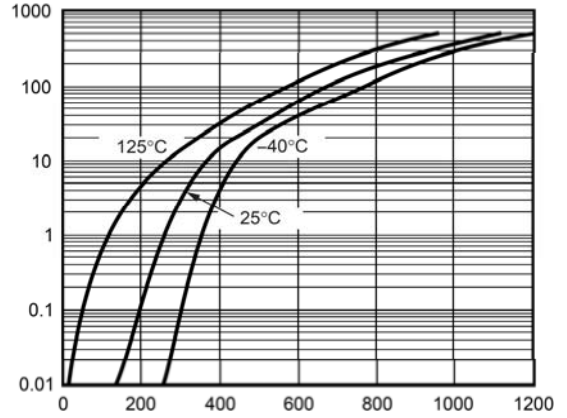
Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage			$V_{(BR)R}$	30			V
Forward voltage	$I_F=10\text{mA}$	LL42	$V_F$			0.4	V
	$I_F=200\text{mA}$	LL42	$V_F$			1.0	V
	$I_F=2\text{mA}$	LL43	$V_F$	0.26		0.33	V
	$I_F=15\text{mA}$	LL43	$V_F$			0.45	V
	$I_F=50\text{mA}$	LL43	$V_F$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

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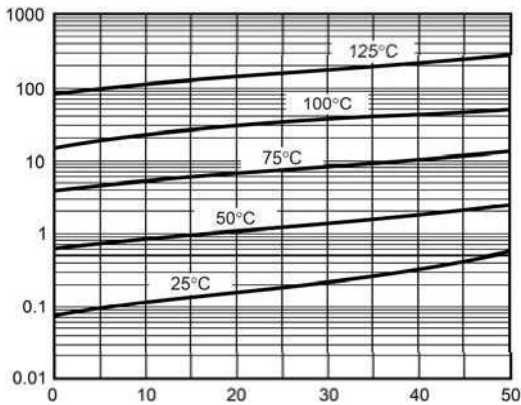
$T_a$  – Ambient temperature (°C)

Figure 1. Admissible power dissipation vs. Ambient temperature



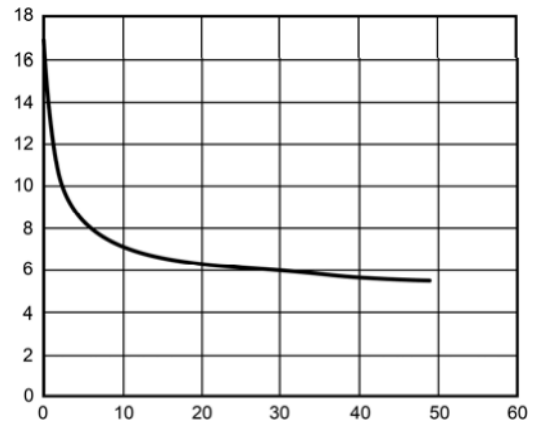
$V_F$  – Instantaneous forward voltage (mV)

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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