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

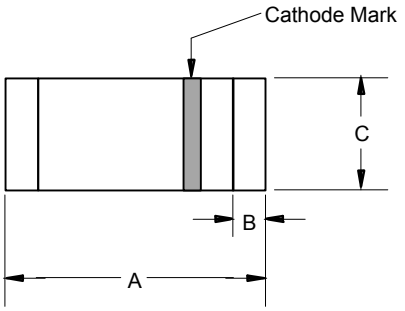
- Case: Minimelf, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.05 grams (approx.)

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°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

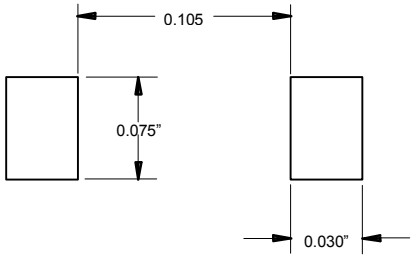
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that electrodes are kept at ambient temperature.

MINIMELF



DIMENSION					
DIM	INCHES		MM		NOTE
	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



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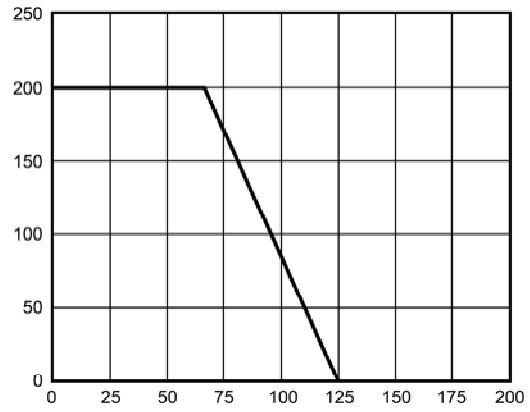
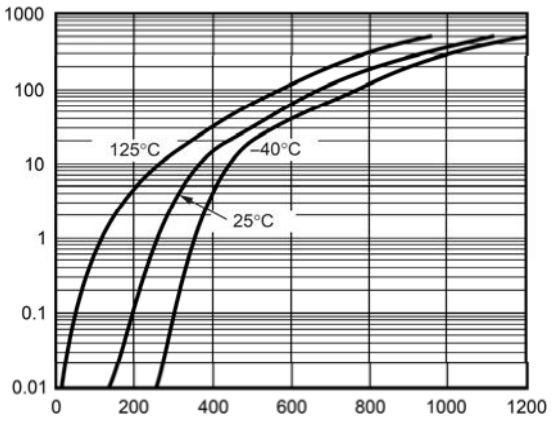
Maximum Ratings @ 25°C Unless Otherwise Specified

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



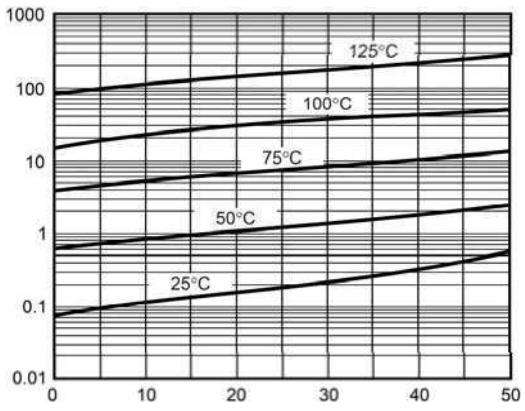
T_a – Ambient temperature (℃)

Figure 1. Admissible power dissipation vs. Ambient temperature



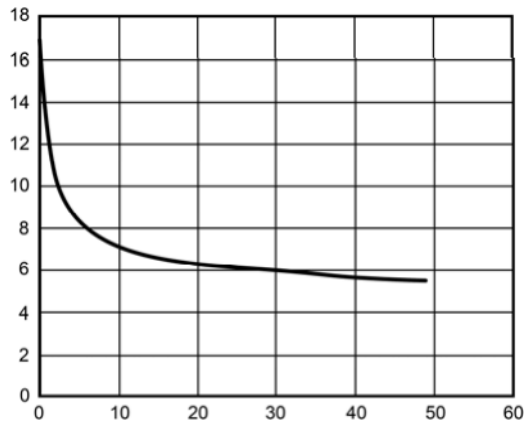
V_F – Instantaneous forward voltage (mV)

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

Ordering Information :

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

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