

CDSL4148-G/4448-G

Reverse Voltage: 75 Volts
Power Dissipation: 500 mW
RoHS Device

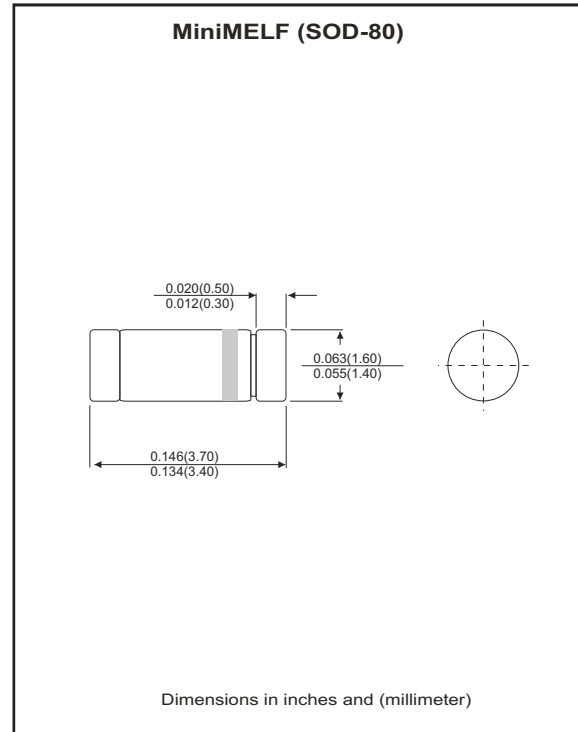


Features

- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.
- Also available in other standard case:
CDSF4148/4448 - SOD323F(1005) size
CDSU4148/4448 - SOD523F(0603) size

Mechanical data

- Case: MiniMELF, glass case.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: indicated by cathode band.
- Approx. weight: 0.05 grams



Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	CDSL4148-G	CDSL4448-G	Units
Repetitive peak reverse voltage	V_{RRM}		75		V
Reverse voltage	V_R		75		V
Forward current	I_{FM}		300	500	mA
Averaged forward current	I_o		150		mA
Peak surge forward current	I_{FSM}	T=1.0 μ S	2		A
Power dissipation	P_D		500		mW
Maximum forward voltage	V_F	@ $I_F=5$ mA @ $I_F=10$ mA @ $I_F=100$ mA	- 1 -	0.72 - 1	V
Maximum reverse current	I_R	@ $V_R=75$ V @ $V_R=25$ V	2.5 0.025		μ A
Maximum reverse recovery time	T_{rr}	$I_F=10$ mA, $R_L=50\Omega$, $V_R=6$ V	4		nS
Typical diode capacitance	C_J	$V_R=0$ V, $f=1.0$ MHz	4		pF
Maximum junction temperature	T_J		175		°C
Storage temperature	T_{STG}		-65 to +175		°C

RATING AND CHARACTERISTIC CURVES (CDSL4148-G/4448-G)

Fig.1 - Forward Characteristics

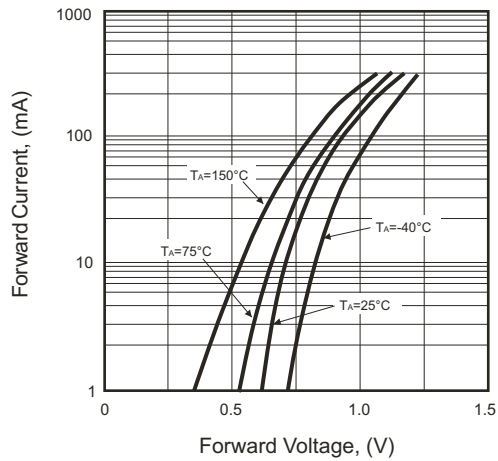


Fig.2 - Reverse Characteristics

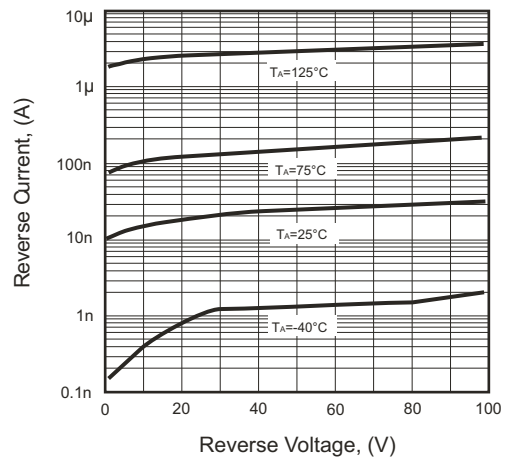


Fig.3 - Capacitance Between Terminals Characteristics

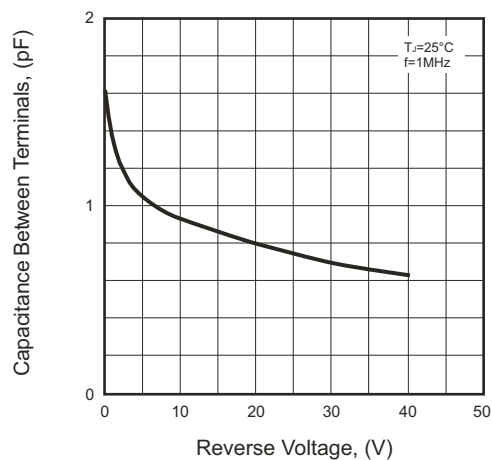
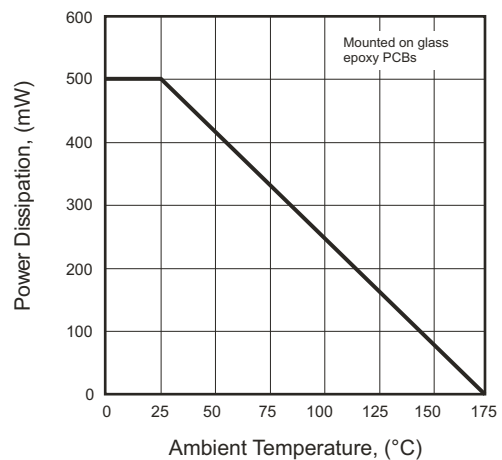
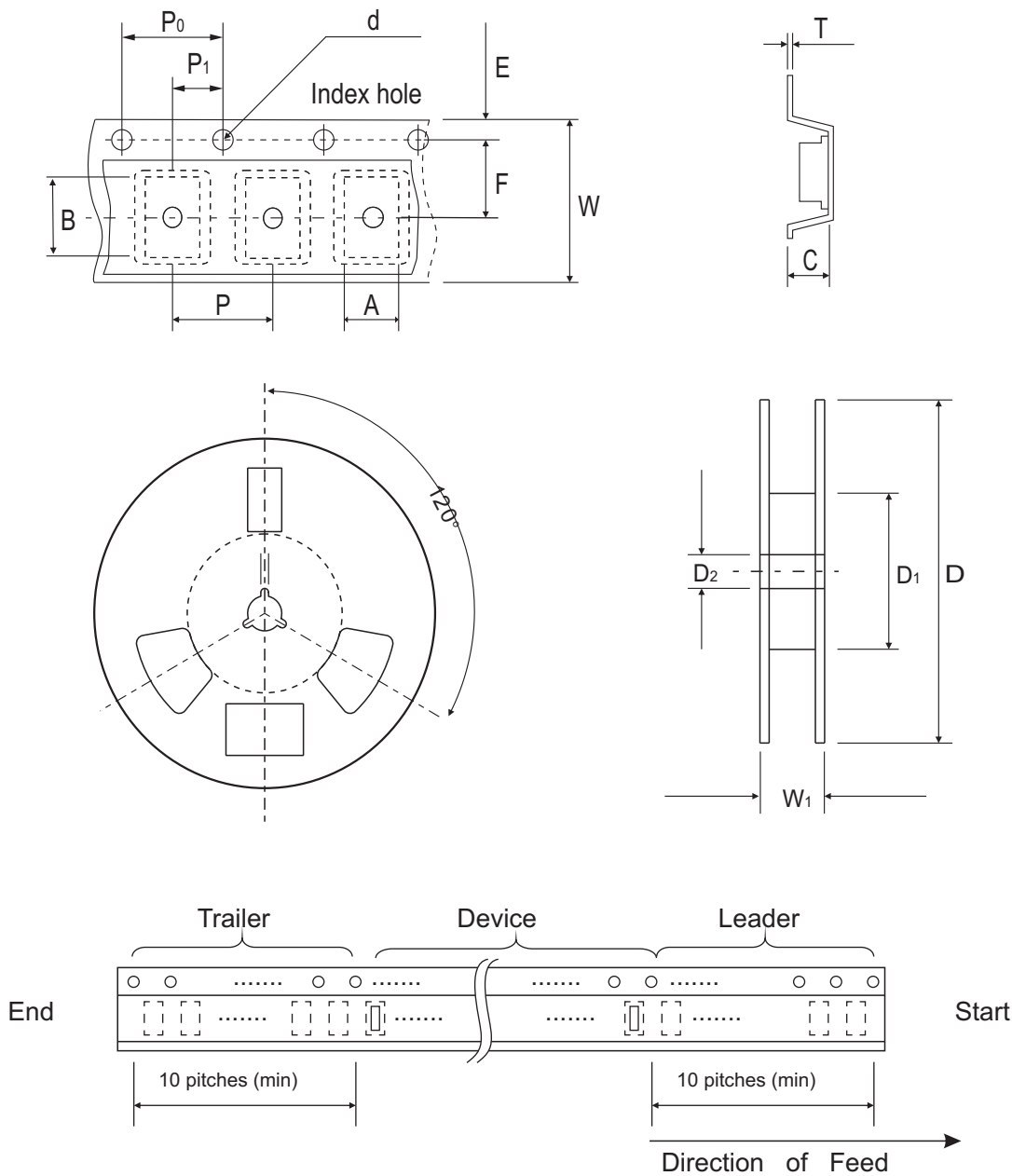


Fig.4 - Power Derating Curve



Reel Taping Specification

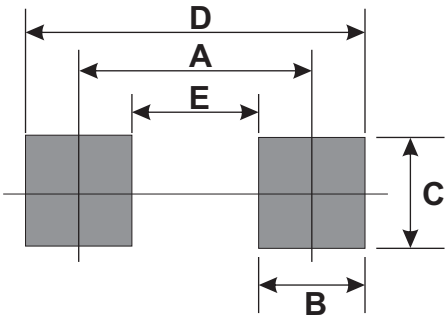


Mini-MELF	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.00 Max.	3.90 Max.	2.00 Max.	1.55 ± 0.10	178 ± 1	50.0 Min.	13.0 ± 0.20
	(inch)	0.079 Max.	0.154 Max.	0.079 Max.	0.061 ± 0.004	7.008 ± 0.04	1.969 Min.	0.512 ± 0.008

Mini-MELF	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 ± 0.30	14.4 Max.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 ± 0.012	0.567 Max.

Suggested PAD Layout

SIZE	Mini-MELF	
	(mm)	(inch)
A	3.40	0.134
B	1.30	0.051
C	1.70	0.067
D	4.70	0.185
E	2.10	0.083



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
Mini-MELF	2,500	7