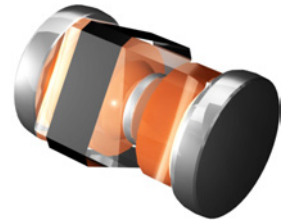


Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Silicon epitaxial planar construction
- Lead free in compliance with EU RoHS 2011/65/EU directive



Micro MELF

Mechanical Data

- Case: Micro MELF, glass
- Terminals: Solderable per MIL-STD-750, method 2026
- Polarity: Cathode band

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Maximum Average Forward Current at T _A =25°C and f ≥50Hz	I _{F(AV)}	150	mA
Surge Forward Current at t<1s and T _J =25°C	I _{FSM}	500	mA
Power Dissipation at T _A =25°C	P _{TOT}	500	mW
Typical Thermal Resistance	R _{θJA}	300	°C/W
Junction Temperature and Storage Temperature Range	T _J , T _{stg}	-65 to +175	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Max.	Unit
Forward Voltage	V _F	I _F =10mA	1.0	V
Leakage Current	I _R	V _R =20V	25	nA
		V _R =75V	5	uA
		V _R =20V, T _J =150°C	50	uA
Capacitance	C _J	V _F =V _R =0, f=1MHz	4	pF
Reverse Recovery Time	t _{rr}	I _F =-I _R =10mA to I _{RR} =-1mA, V _R =6V, R _L =100Ω	4	ns

Ratings and Characteristic Curves

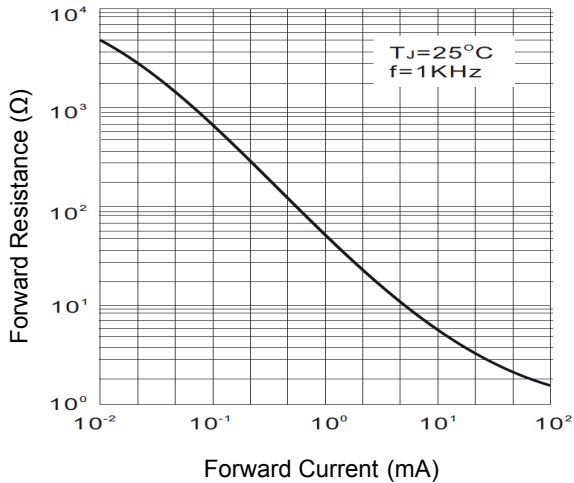


Figure 1. Dynamic Forward Resistance vs. Forward Current

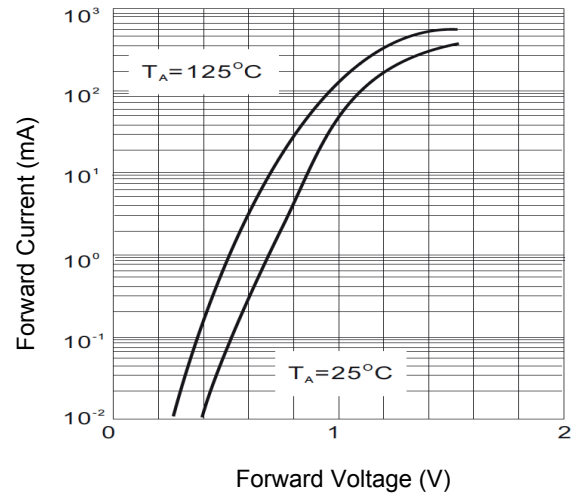


Figure 2. Forward Characteristics

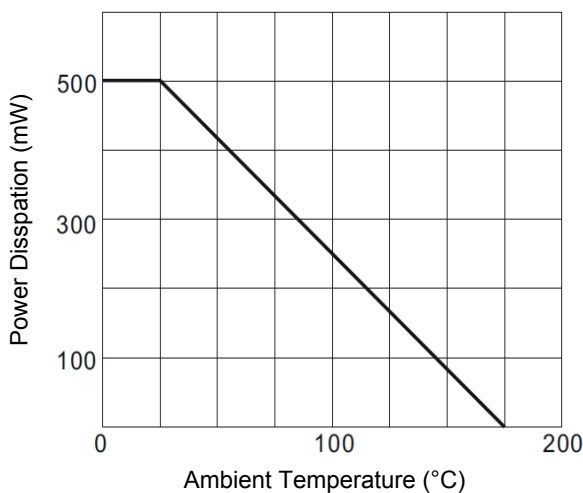


Figure 3. Derating Curve

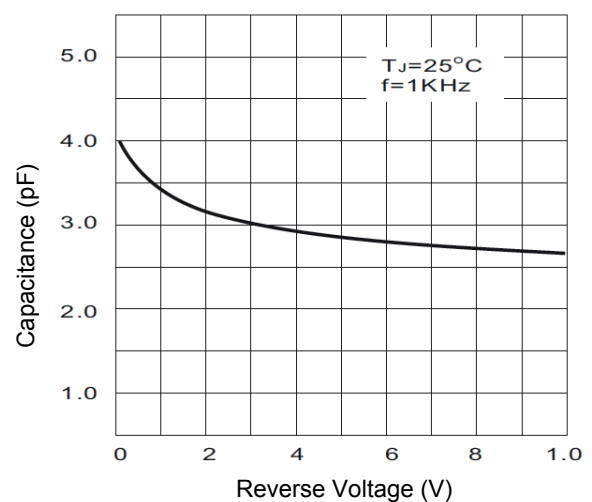


Figure 4. Typical Junction Capacitance

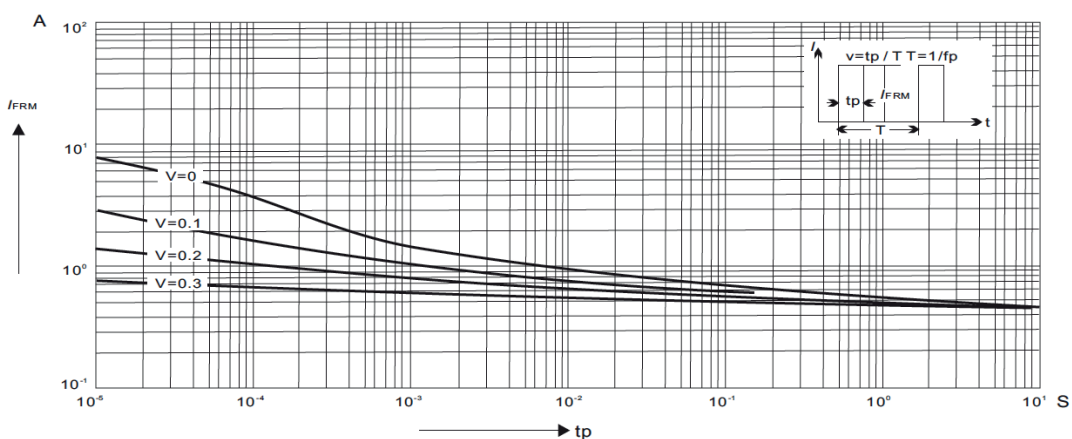
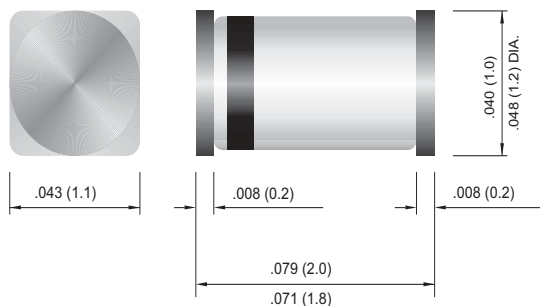


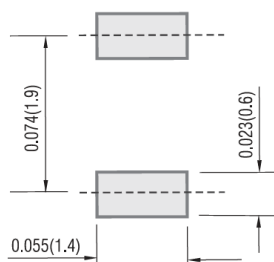
Figure 5. Admissible Repetitive Peak Forward Current vs. Pulse Duration

Package Outline Dimensions (Micro MELF)



Unit: inch (mm)

Recommended Pad Layout



Unit: inch (mm)

Order Information

Device	Package	Marking	Carrier	Quantity
GSMCL4148	Micro MELF	Cathode line	Tape & Reel	3,000 Pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com