

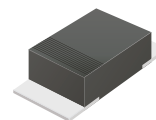
CGRKM4001-HF Thru. CGRKM4007-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

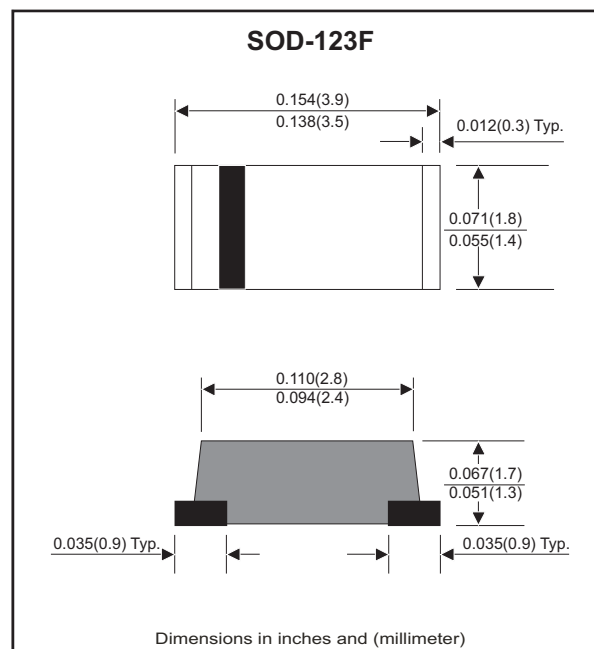


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Exceeds environmental standard MIL-S-19500/228.
- Low leakage current.

Mechanical data

- Epoxy: UL94-V0 rated flame retardant.
- Case: Molded plastic, SOD-123F
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.027 grams approx.



Maximum Ratings (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter		Symbol	CGRKM 4001-HF	CGRKM 4002-HF	CGRKM 4003-HF	CGRM 4004-HF	CGRKM 4005-HF	CGRKM 4006-HF	CGRKM 4007-HF	Unit
Maximum repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Maximum DC blocking voltage		V _{DC}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	V
Maximum averaged forward current		I _O	1.0							A
Maximum Instantaneous forward voltage at I _F =1.0A		V _F	1.1							V
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	30							A
Reverse current at rated DC blocking voltage	@TA=25°C	I _R	5							μA
	@TA=100°C		50							
Thermal resistance, junction to ambient air		R _{θJA}	60							°C/W
Operating junction temperature		T _J	-55 to +150							°C
Storage temperature range		T _{STG}	-65 to +170							°C
Junction capacitance f=1MHz and applied 4V DC reverse voltage		C _J	15							pF

Rating and Characteristic Curves (CGRKM4001-HF Thru. CGRKM4007-HF)

Fig.1- Current Derating Curve

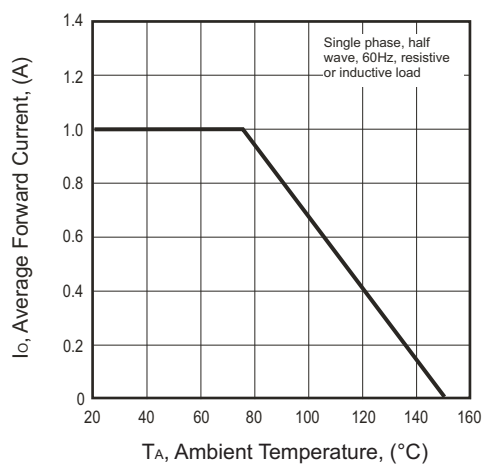


Fig.2- Forward Characteristics

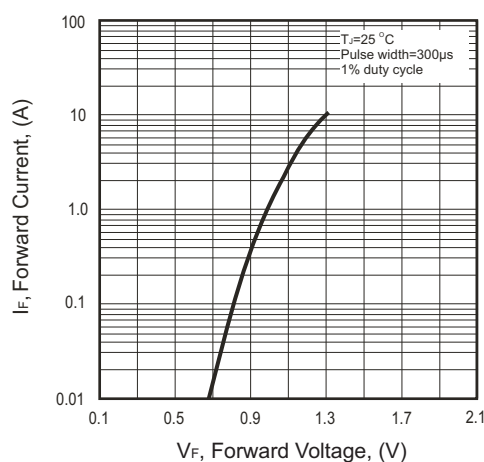


Fig.3- Non-repetitive Forward Surge Current

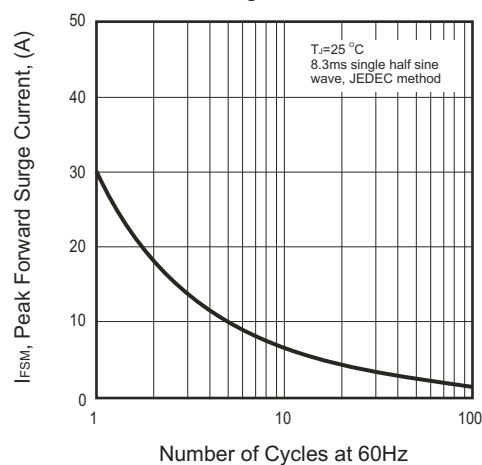


Fig.4- Reverse Characteristics

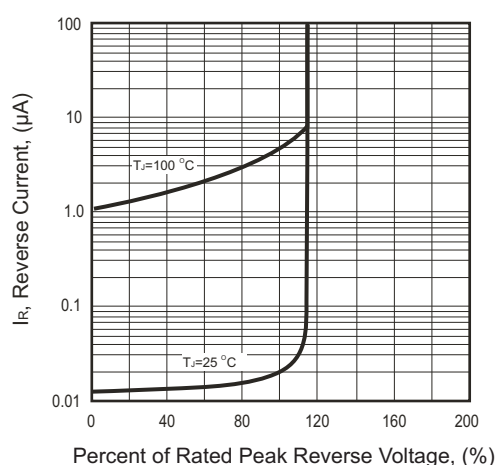
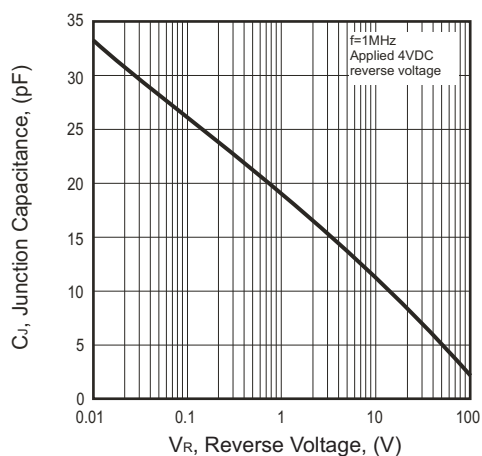
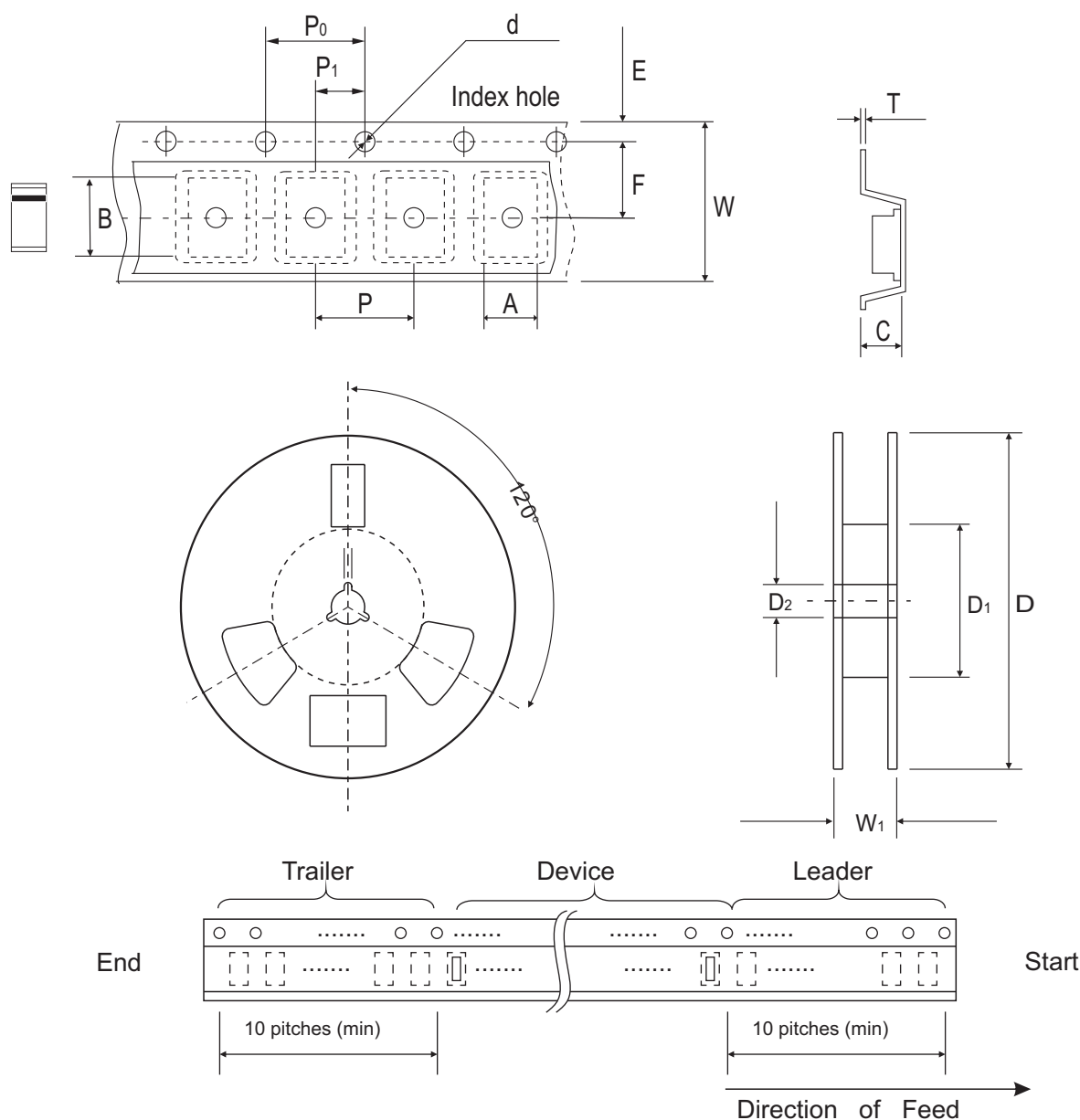


Fig.5- Junction Capacitance



Reel Taping Specification



KM SOD-123F	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.90 ± 0.10	3.90 ± 0.10	1.68 ± 0.10	1.50 ± 0.10	178 ± 2.00	62.0 MIN.	13.0 ± 0.50
	(inch)	0.075 ± 0.04	0.154 ± 0.04	0.066 ± 0.04	0.059 ± 0.004	7.00 ± 0.079	2.440 MIN.	0.512 ± 0.020

KM SOD-123F	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	8.00 ± 0.30	11.40 ± 1.0
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.315 ± 0.012	0.449 ± 0.004

Marking Code

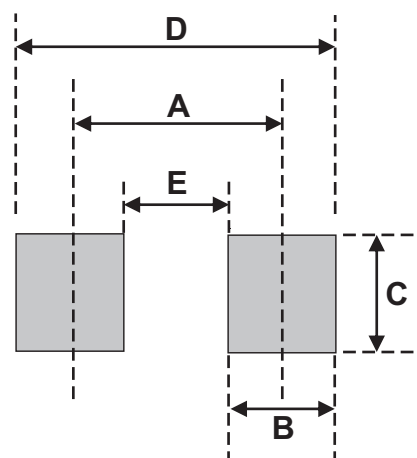
Part Number	Marking Code
CGRKM4001-HF	A1
CGRKM4002-HF	A2
CGRKM4003-HF	A3
CGRKM4004-HF	A4
CGRKM4005-HF	A5
CGRKM4006-HF	A6
CGRKM4007-HF	A7



xx = Product type marking code

Suggested PAD Layout

SIZE	KM/SOD-123F	
	(mm)	(inch)
A	3.30	0.130
B	1.40	0.055
C	1.90	0.075
D	4.70	0.185
E	1.90	0.075



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
KM/SOD-123F	2,500	7