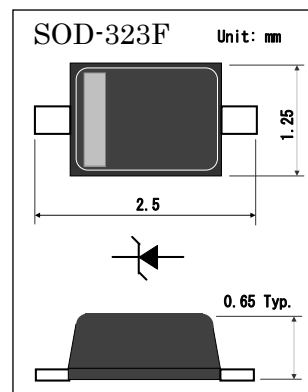


SOD-323F Plastic-Encapsulate Diodes

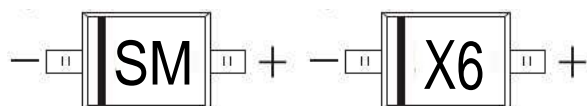
Schottky Barrier Diode

Features:

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability



Marking: SM,X6



MAXIMUM RATINGS(Ta=25°C unless otherwise noted)

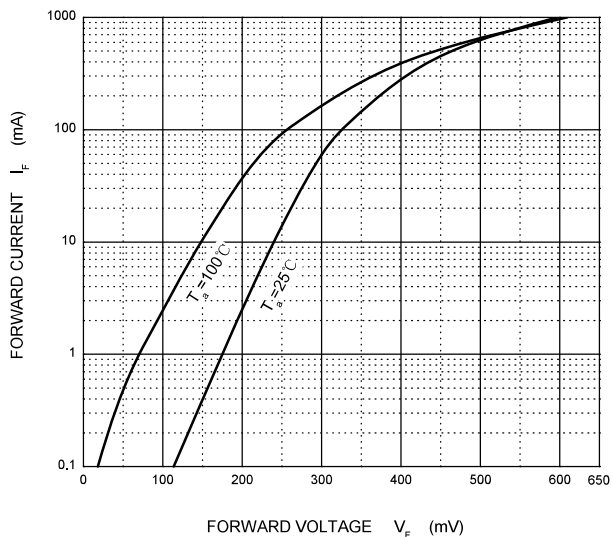
Symbol	Parameter	Value	Unit
V _{RRM}	Maximum recurrent peak reverse voltage	60	V
V _{RMS}	Maximum RMS voltage	42	
V _{DC}	Maximum DC blocking voltage	60	
I _F	Continuous forward current	1	A
I _{FSM}	Non-repetitive Peak forward surge current@t=8.3ms	10	
P _{tot}	Total power dissipation	250	mW
R _{θJA}	Thermal resistance junction to ambient air	400	°C/W
T _J	Operating Junction Temperature Range	-40 ~ +125	°C
T _{stg}	storage Temperature Range	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

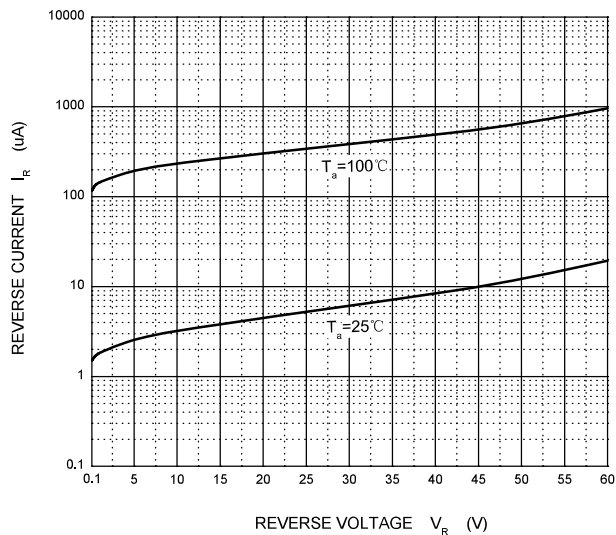
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum instantaneous forward voltage	V _F	I _F =1A			0.7	V
Maximum DC reverse current at rated DC blocking voltage	I _R	V _R =60V		10	40	uA
Total capacitance	C _{tot}	V _R =4V,f=1MHz			120	pF

Typical Characteristics

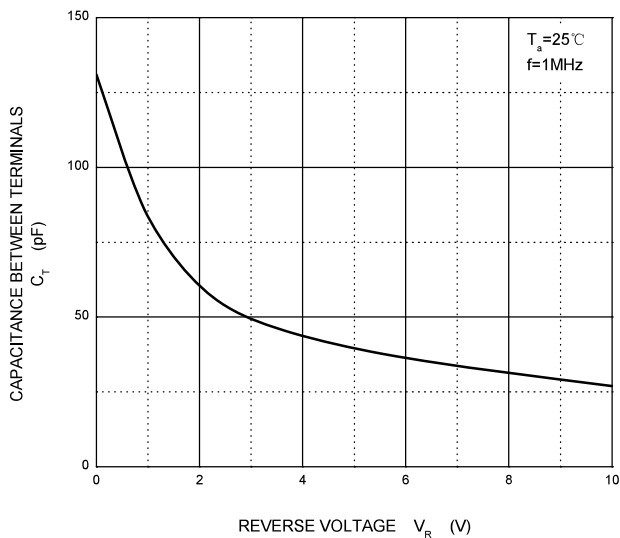
Forward Characteristics



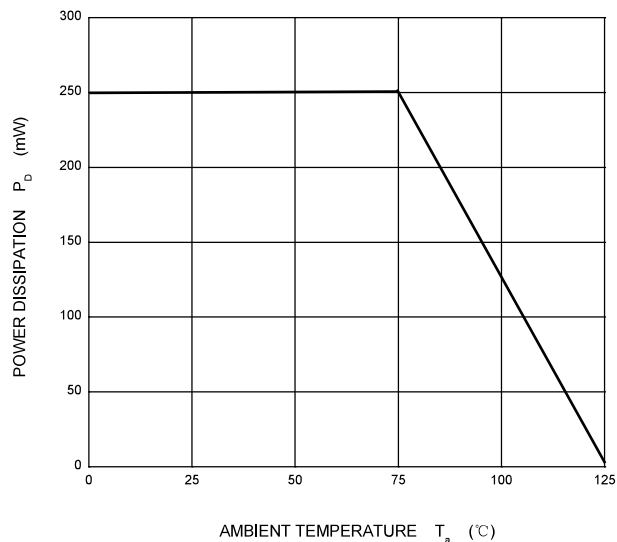
Reverse Characteristics



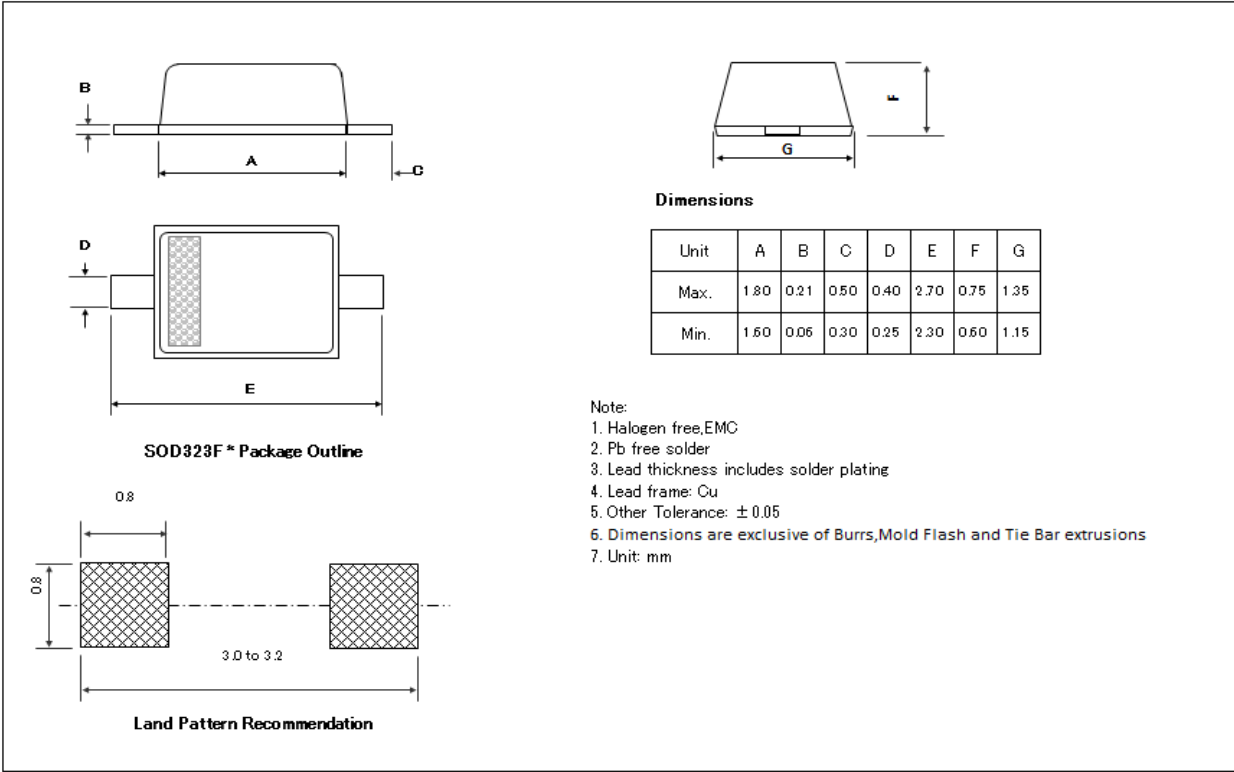
Capacitance Characteristics



Power Derating Curve



PACKAGE OUTLINE AND PAD LAYOUT INFORMATION



The diagram shows the SOD323F package outline with dimensions A, B, C, D, E, F, and G. It also includes a top view of the package showing the lead thickness 'h' and the width 'G'. Below the package outline is the 'Land Pattern Recommendation' showing two rectangular pads with a width of 0.8 and a length of 3.0 to 3.2.

SOD323F * Package Outline

Dimensions

Unit	A	B	C	D	E	F	G
Max.	1.80	0.21	0.50	0.40	2.70	0.75	1.35
Min.	1.60	0.06	0.30	0.25	2.30	0.60	1.15

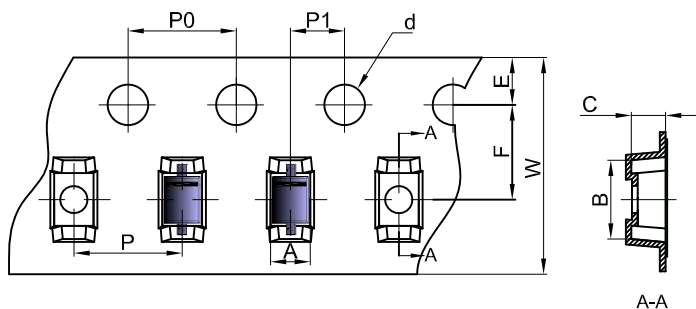
Note:

1. Halogen free, EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: Cu
5. Other Tolerance: ± 0.05
6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
7. Unit: mm

Land Pattern Recommendation

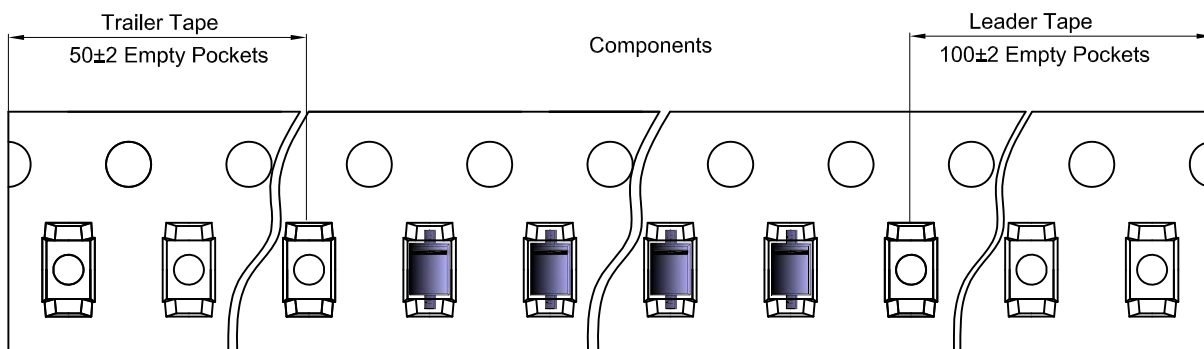
SOD-323F Tape and Reel

Embossed Carrier Tape

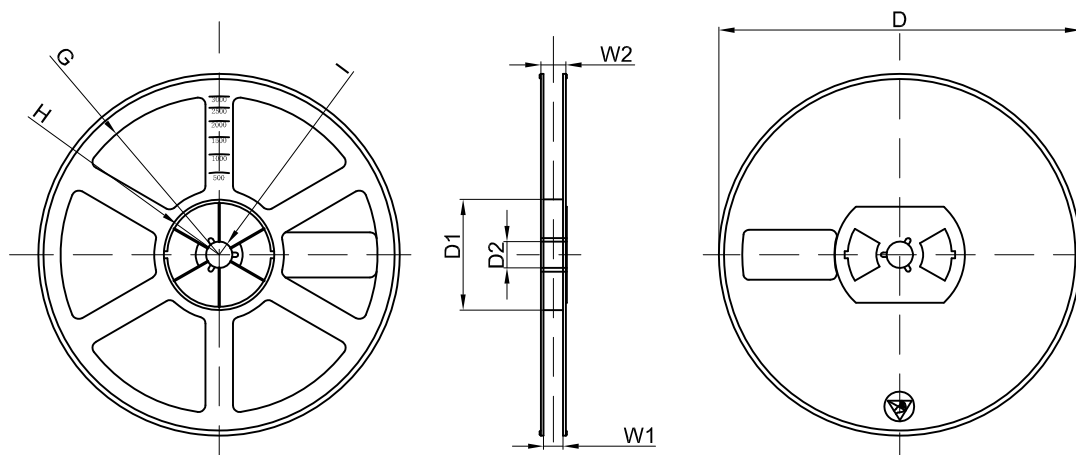


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	0.85	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

Tape Leader and Trailer



Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	