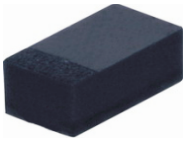
SMD Schottky Barrier Diode

CDBFR0145-HF

Io = 100 mA
VR = 45 Volts
RoHS Device
Halogen Free



Features

-Designed for mounting on small surface.

-Extremely thin/leadless package.

-Low leakage current.
(IR=0.1uA typ.@VR=10V)

-Majority carrier conduction.

Mechanical data

-Case: 1005/SOD-323F standard package, molded plastic.

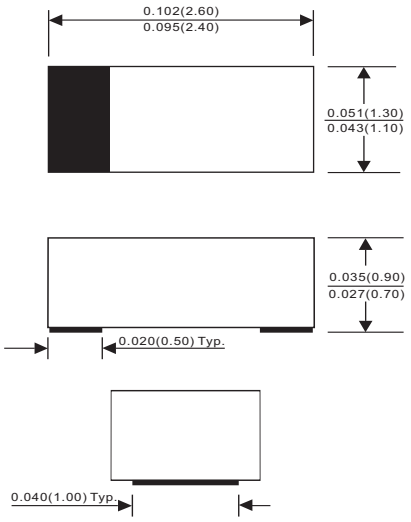
-Terminals: Gold plated, solderable per MIL-STD-750,method 2026.

-Marking code: cathode band & B4

-Mounting position: Any

-Weight: 0.006 gram(approx.).

1005/SOD-323F



Dimensions in inches and (millimeter)

Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		VRRM			50	V
Reverse voltage		VR			45	V
Average forward current		Io			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	IFSM		1000		mA
Power Dissipation		PD			250	mW
Sunction temperature		TSTG	-40		+125	°C
Junction temperature		Tj			+125	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 100 mA DC	VF			0.55	V
Reverse current	VR = 10V	IR			1	uA
Capacitance between terimnals	F = 1 MHZ and 10 VDC reverse voltage	CT		9		pF

RATING AND CHARACTERISTIC CURVES (CDBFR0145-HF)

Fig. 1 - Forward characteristics

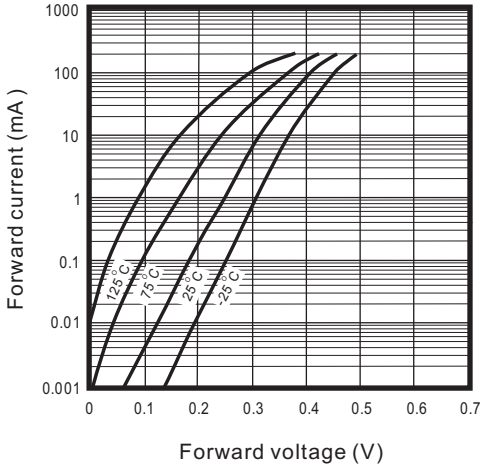


Fig. 2 - Reverse characteristics

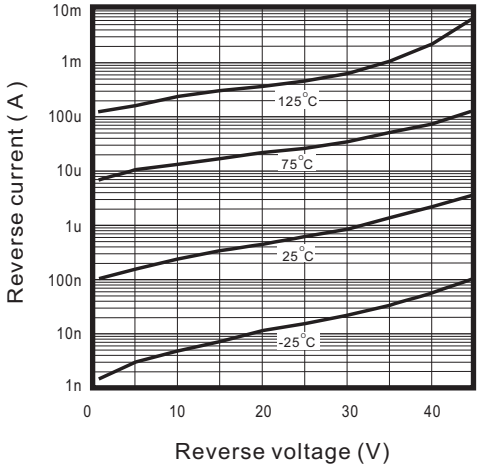


Fig.3 - Capacitance between terminals characteristics

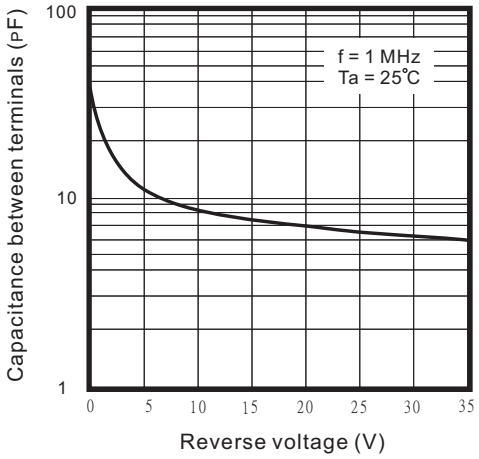
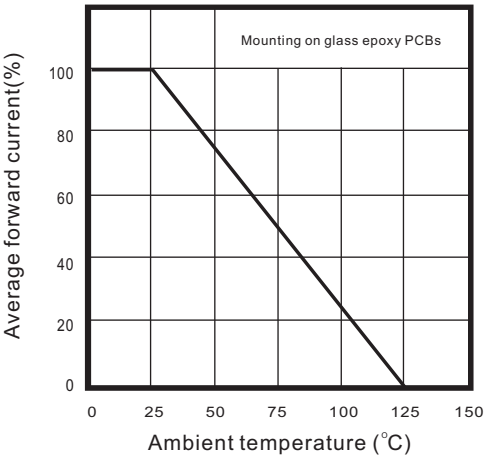
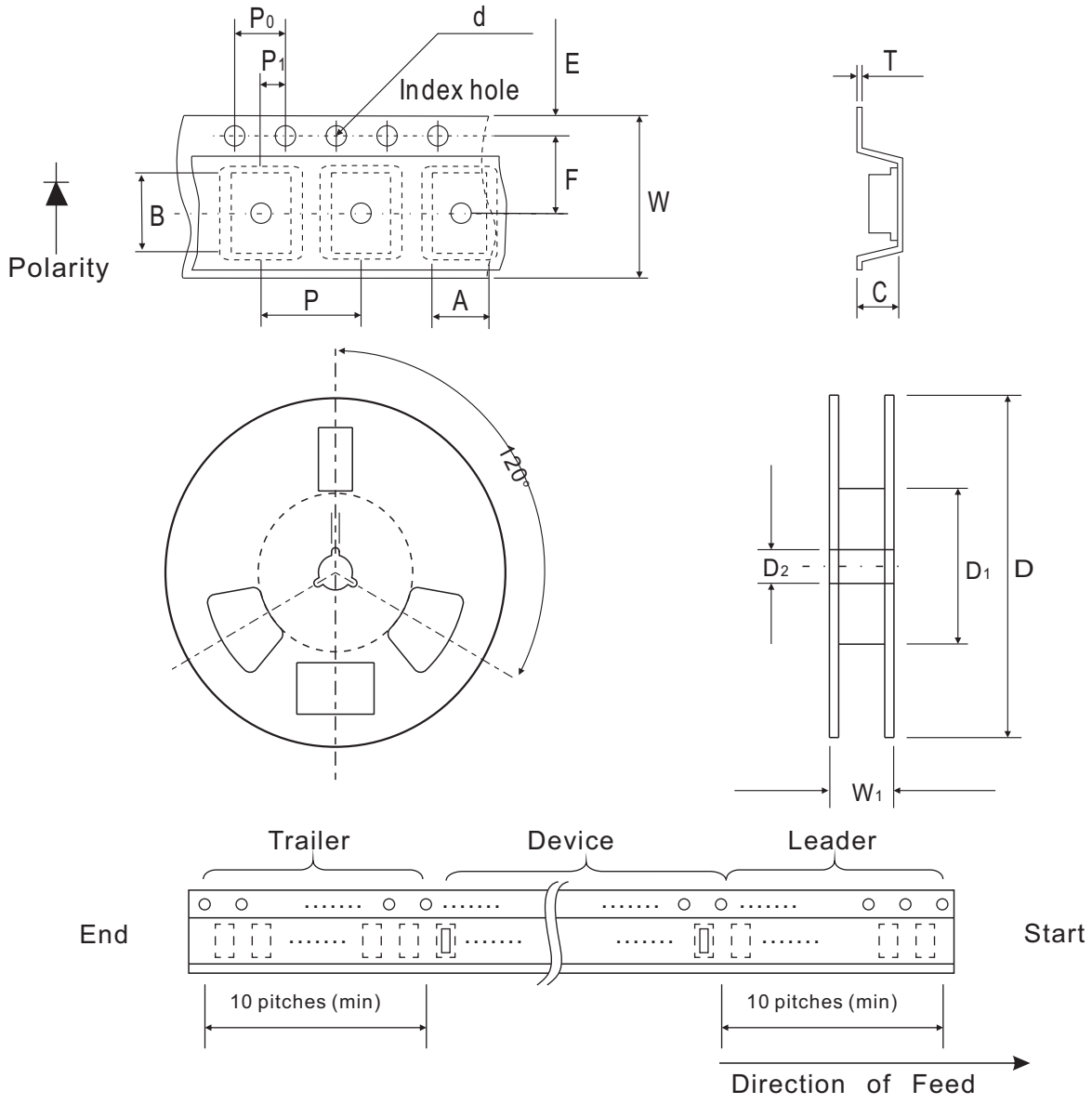


Fig.4 - Current derating curve



Reel Taping Specification



	SYMBOL	A	B	C	d	D	D_1	D_2
1005 (SOD-323F)	(mm)	1.55 ± 0.10	2.65 ± 0.10	1.05 ± 0.10	1.55 ± 0.05	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.061 ± 0.004	0.104 ± 0.004	0.041± 0.004	0.061 ± 0.002	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
1005 (SOD-323F)	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.20	13.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

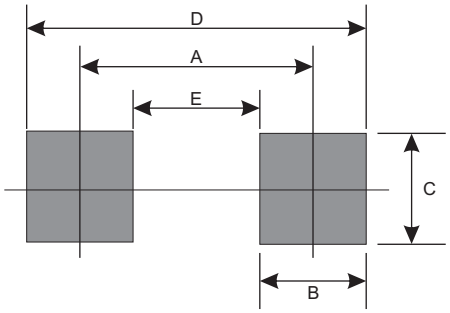
Marking Code

Park Number	Marking Code
CDBFR0145-HF	B4



Suggested PAD Layout

SIZE	1005/SOD-323F	
	(mm)	(inch)
A	2.00	0.079
B	0.70	0.028
C	1.30	0.051
D	2.70	0.106
E	1.30	0.051



Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
1005/SOD-323F	4000	7