

Schottky Barrier Rectifiers

Reverse Voltage 40V Forward Current 2.0A

FEATURES

- * Plastic package has Under writers Laboratory Flammability Classification 94V-0
- * Low power loss,high efficiency
- * For use in low voltage high frequency inverters, free wheeling,and polarity
- * Guardringfor over voltage protection
- * High temperature soldering guaranteed: 260 °C/10 seconds at terminals

Mechanical Data

Case: SOD-323F
molded plastic over sky die

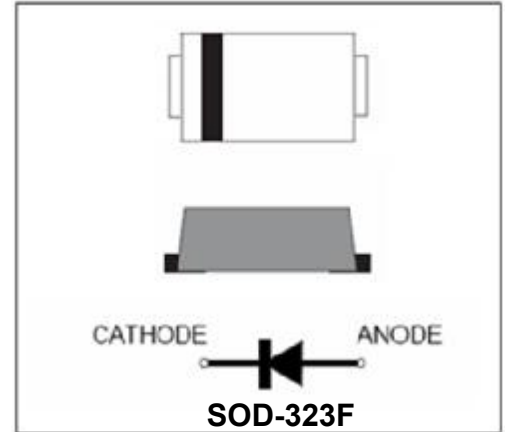
Terminals: Tin Plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.011 g

Handling precautin:None



We declare that the material of product is Haloggenfree (green epoxy compound)

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
FDR240F	24	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current at TC = 75°C	IF(AV)	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	A
Typical thermal resistance (Note 1)	RθJA	220	°C/W
	RθJC	50	
Operating junction temperature range	TJ	-55 ~ +125	°C
storage temperature range	TSTG	-55 ~ +150	°C

Note: 1. 8.0mm² (.013mm thick) land areas

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum instantaneous forward (IF = 1.0 A, TJ = 25°C)	VF	-	-	0.43	V
		-	-	0.5	
Maximum DC reverse current at rated DC blocking voltage TA = 25°C	IR	-	-	0.1	mA
		-	-	20	
Typical junction capacitance at 4.0V, 1MHz	CJ	-	65	-	pF

5. ELECTRICAL CHARACTERISTICS CURVES

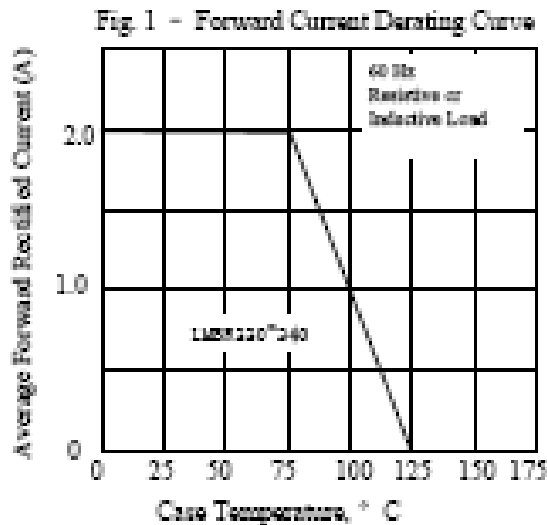


Fig. 1 - Forward Current Derating Curve

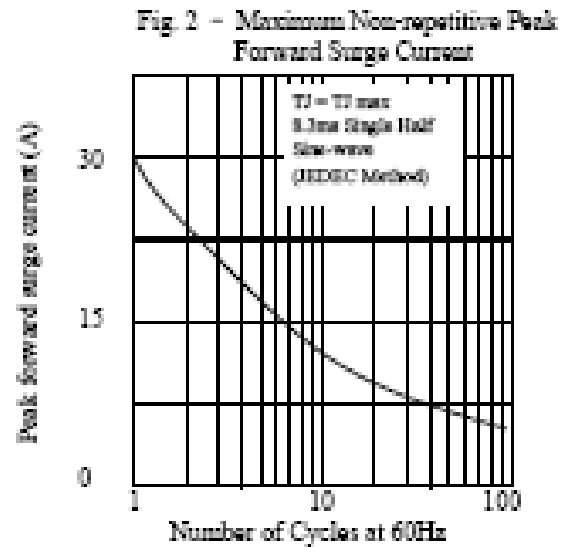


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

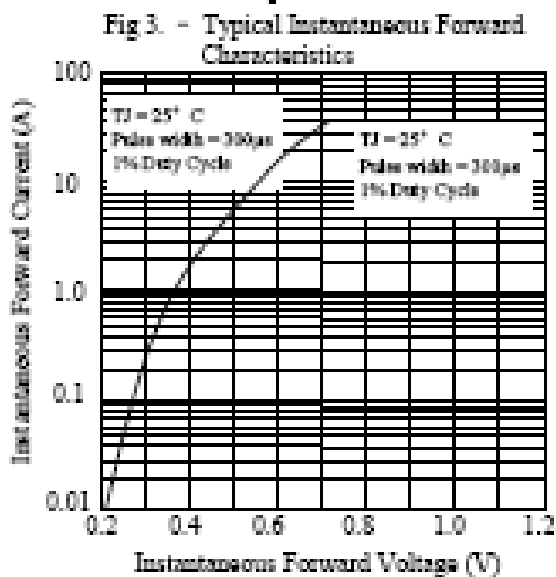


Fig. 3 - Typical Instantaneous Forward Characteristics

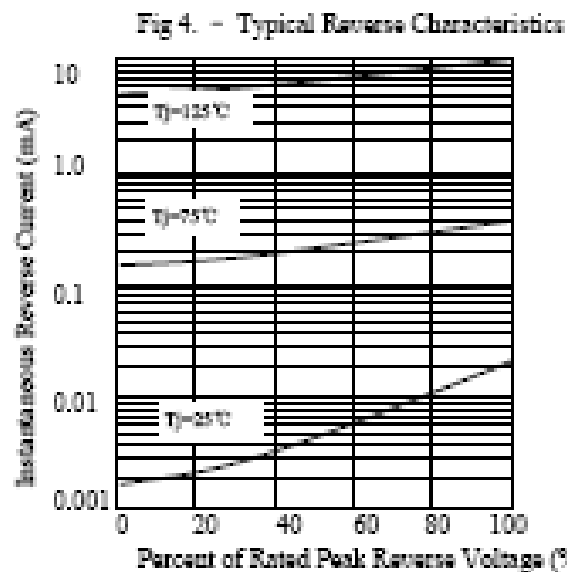


Fig. 4 - Typical Reverse Characteristics

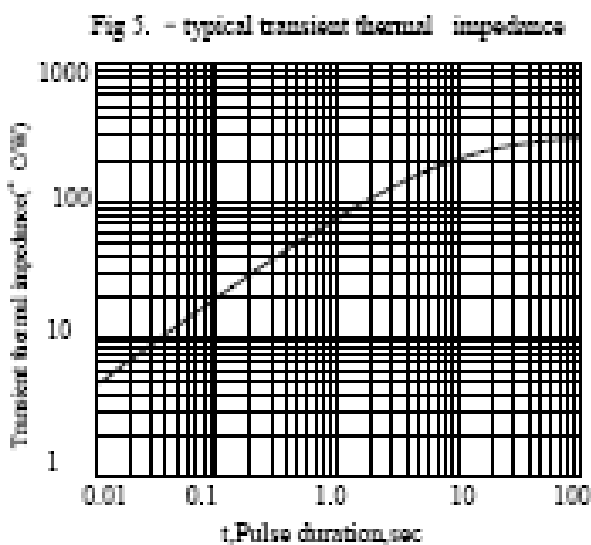


Fig. 5 - typical transient thermal impedance

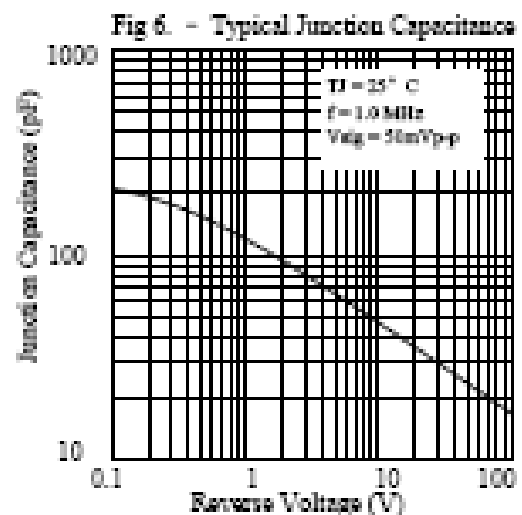
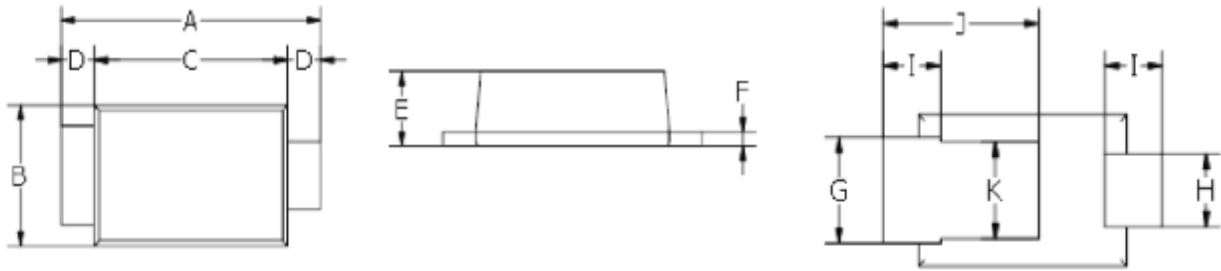


Fig. 6 - Typical Junction Capacitance

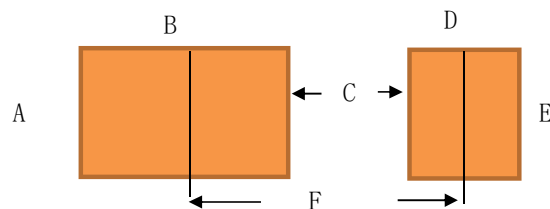
3. dimension:

SOD-323F



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.30	2.70	0.091	0.106
B	1.20	1.40	0.047	0.055
C	1.75	1.95	0.069	0.077
D	0.30Typ		0.012Typ	
E	0.55	0.75	0.022	0.030
F	0.10	0.20	0.004	0.008
G	0.65	0.95	0.026	0.037
H	0.50	0.70	0.020	0.028
I	0.40	0.80	0.016	0.031
J	1.15	1.55	0.045	0.061
K	0.8Typ		0.032Typ	

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C	D	E	F
SOD123-FL	0.044(1.10)	0.079(2.00)	0.019(0.5)	0.032(0.8)	0.04(1.00)	0.075(1.90)