High Efficient Rectifier Diode

■ Features

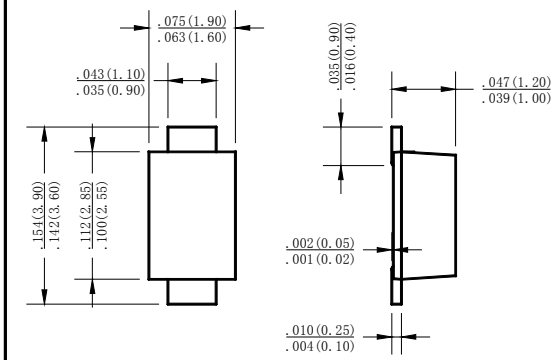
- I_o 1.0A
- V_{RRM} 50V~1000V
- Glass passivated chip
- High surge forward current capability

■ Applications

- For general power supply single - phase rectifier

■ Outline Dimensions and Mark

SOD- 123F



Dimensions in inches and (millimeters)

■ Limiting Values（Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	H1						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_O	A	60Hz One-way half-wave, R- load, Ta=75℃	1.0						
Surge(Non- repetitive) Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, T_j=25℃	30						
Storage Temperature	T_{stg}	℃		-55 ~ +150						
Junction Temperature	T_j	℃		-55 ~ +150						

■ Electrical Characteristics （Ta=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition	H1						
				A	B	D	G	J	K	M
Peak Forward Voltage	V_{FM}	V	I_{FM}=1.0A	1.0			1.3	1.7		
Maximum reverse recovery time	t_{rr}	ns	I_F=0.5A, I_R=1.0A, I_{RR}=0.25A	50				75		
Peak Reverse Current	I_{RRM}	μA	V_{RM}=V_{RRM} , Ta=25℃	5						
Thermal Resistance	$R_{\theta J-L}$	℃/W	Between junction and lead	20						

Characteristics(Typical)

FIG1:Io-Ta Curve

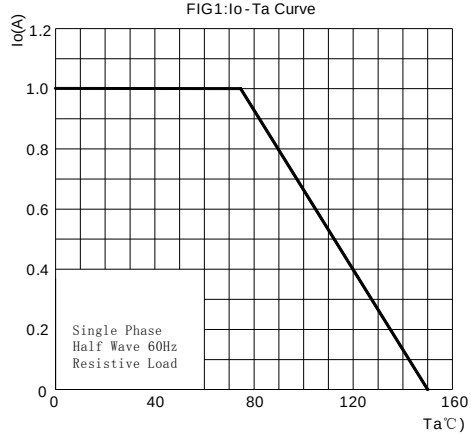


FIG2:Surge Forward Current Capadility

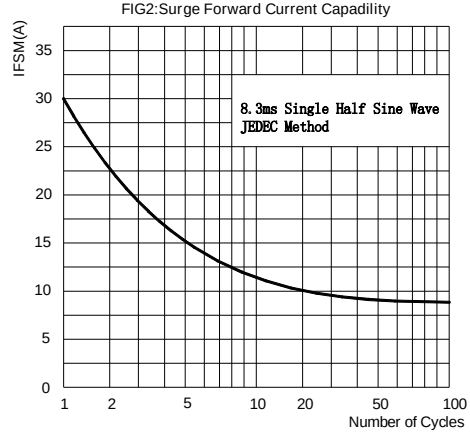


FIG3: Forward Voltage

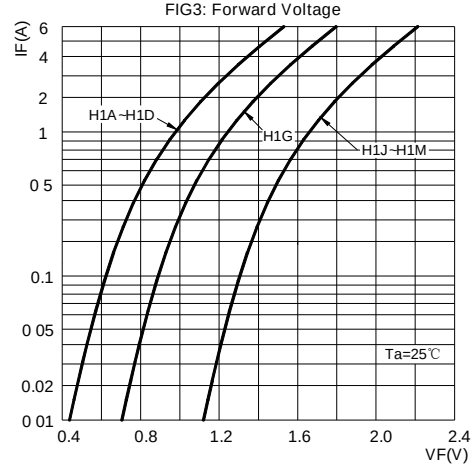


FIG4:Typical Reverse Characteristics

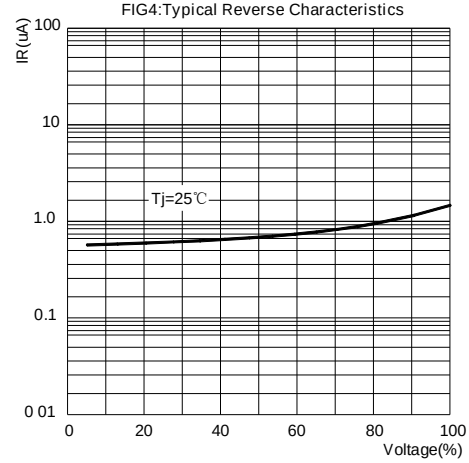


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time