



型号: 1N4007

整流二极管 Rectifier diode

主要特性/Features

表面贴装快速恢复整流器 Surface Mount Fast Recovery Rectifiers

反向电压-50至1000 V Reverse Voltage - 50 to 1000 V

正向电流-1A Forward Current - 1 A

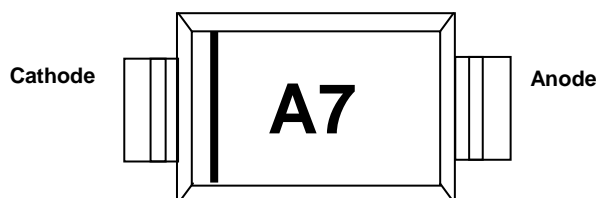
高电流能力和低正向压降 High current capability and low forward voltage drop

应用/Application

消费电子产品 Consumer electronics

印字/MARKING

等效电路/Equivalent Circuit





电性能参数/Electrical characteristics (Ta=25°C)

Parameter	Symbol	FR10 1W	FR10 2W	FR10 3W	FR10 4W	FR10 5W	FR10 6W	FR10 7W	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Tc = 125 °C	IF(AV)	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	IFSM	30							A
Maximum Forward Voltage at 1 A	VF	1.3							V
Maximum DC Reverse Current	IR	5 100							μ A
Typical Junction Capacitance at VR=4V, f=1MHz	Cj	15							pF
Maximum Reverse Recovery Time (1)	trr	150				250	500		ns
Typical Thermal Resistance (2)	Rθ JA								°C/W
Operating and Storage Temperature Range	Tj, Tstg								°C



典型特性曲线图/Typical Characteristics

Fig.1 Forward Current Derating Curve

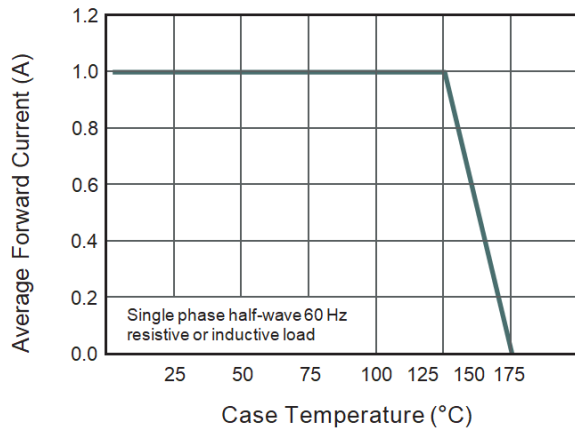


Fig.2 Typical Reverse Characteristics

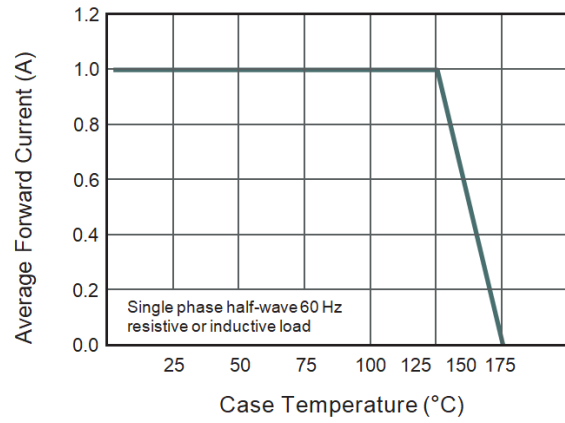


Fig.3 Typical Instantaneous Forward Characteristics

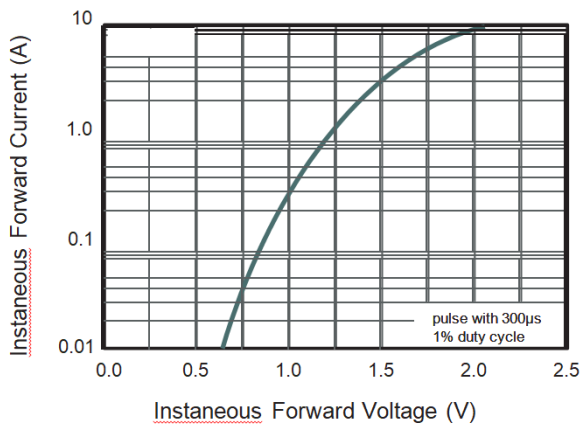


Fig.4 Typical Junction Capacitance

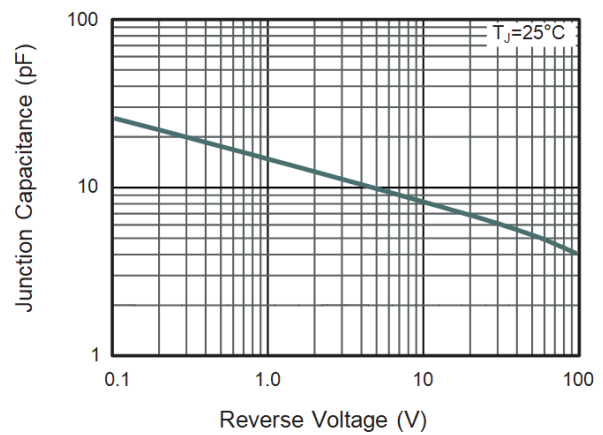
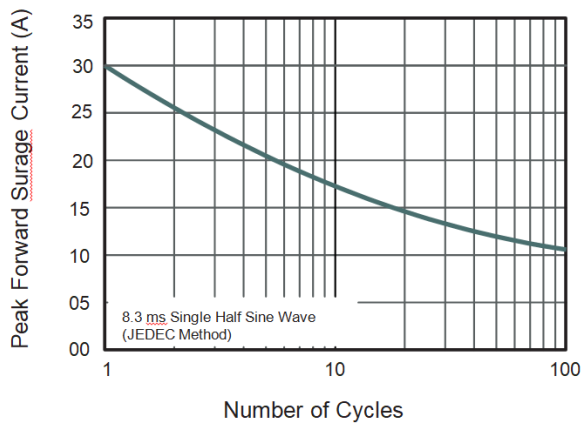
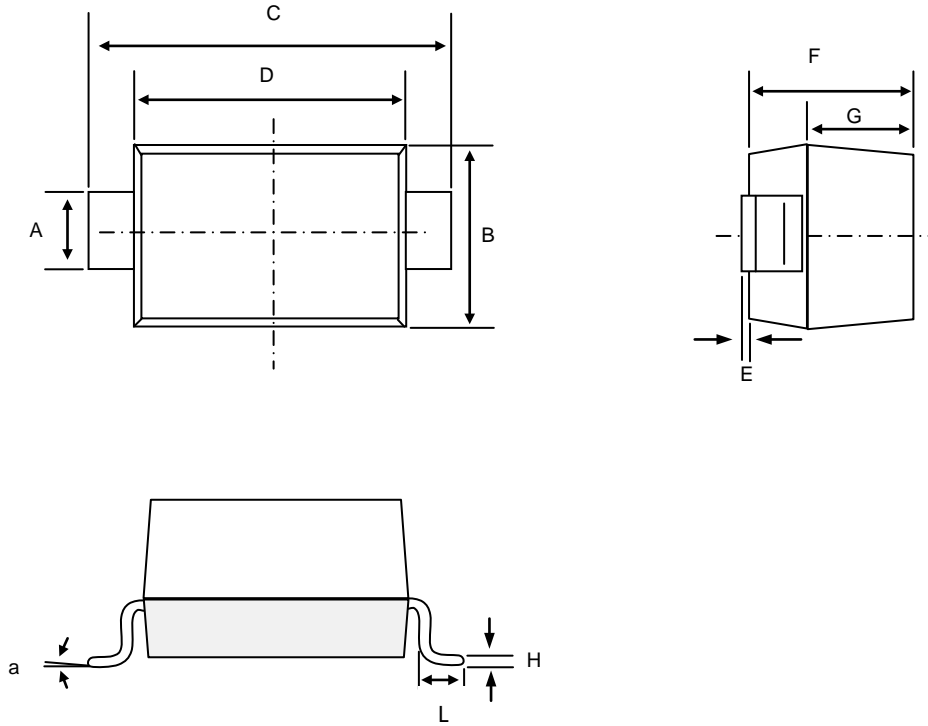


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





成品外观尺寸/SOD-123 Package Information



Symbol	Dim in mm		
	Min	Nor	Max
A	0.520	0.550	0.570
B	1.400	1.550	1.700
C	3.350	3.650	3.850
D	2.550	2.650	2.850
E	0.000	0.050	0.100
F	1.050	1.100	1.150
G	0.620	0.650	0.670
H	0.100	0.110	0.120
L	0.250	0.350	0.450
a	0°	-	6°