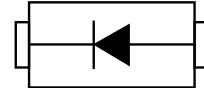


**Feature**

- Ultra Small mold type. SMA
- Low  $I_R$
- High reliability.


**Applications**

- Low current rectification

**Construction**

- Silicon epitaxial planar

**Mechanical Characteristics**

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17  $\mu\text{m}$
- Pin flatness :  $\leq 3\text{mil}$

**Electrical characteristics per line@25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.5	V	$I_F=1\text{A}$
Reverse current	$I_R$	-	-	20	$\mu\text{A}$	$V_R=20\text{V}$

**Absolute maximum rating@25°C**

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	$V_{RM}$	20	V
Average rectified forward current	$I_o$	1	A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	30	A
Operating Junction temperature Range	$T_j$	-55 to 125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

Typical Characteristics

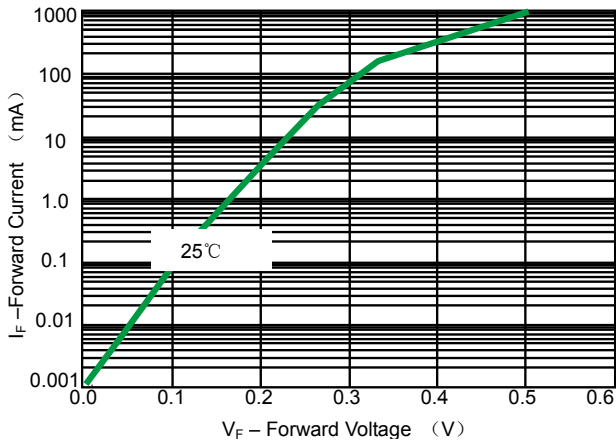


Fig 1. Forward Voltage

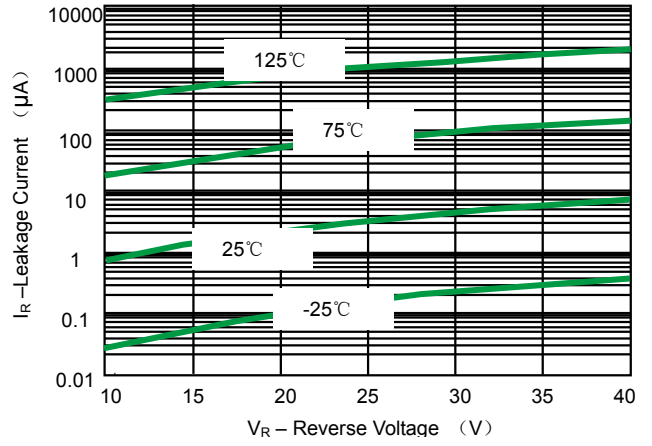


Fig 2. Leakage Current

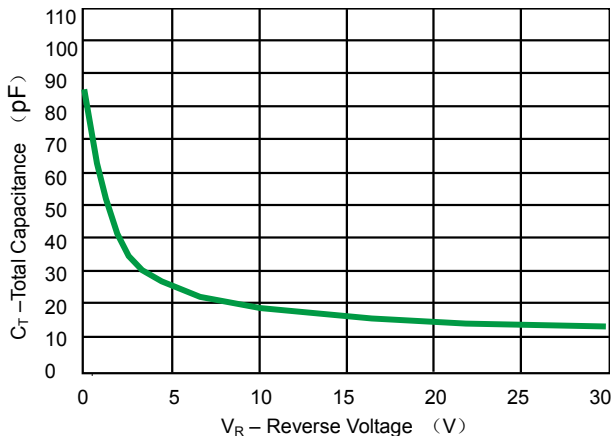
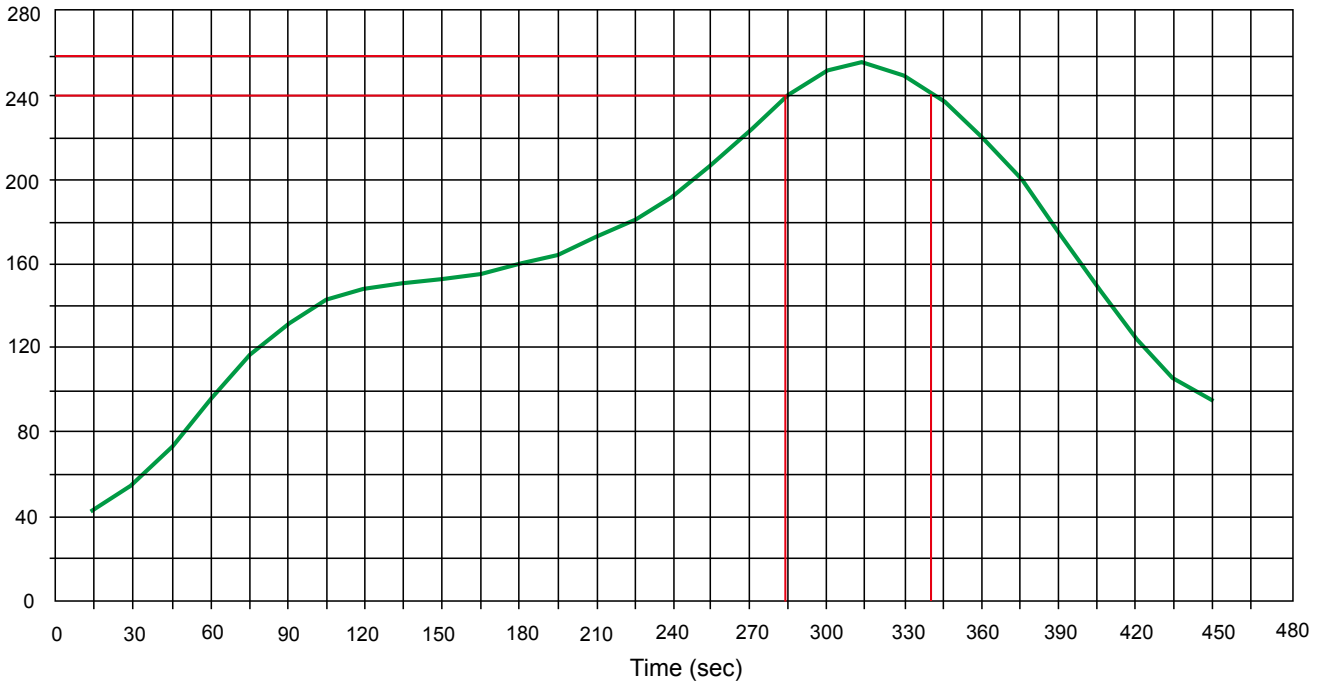


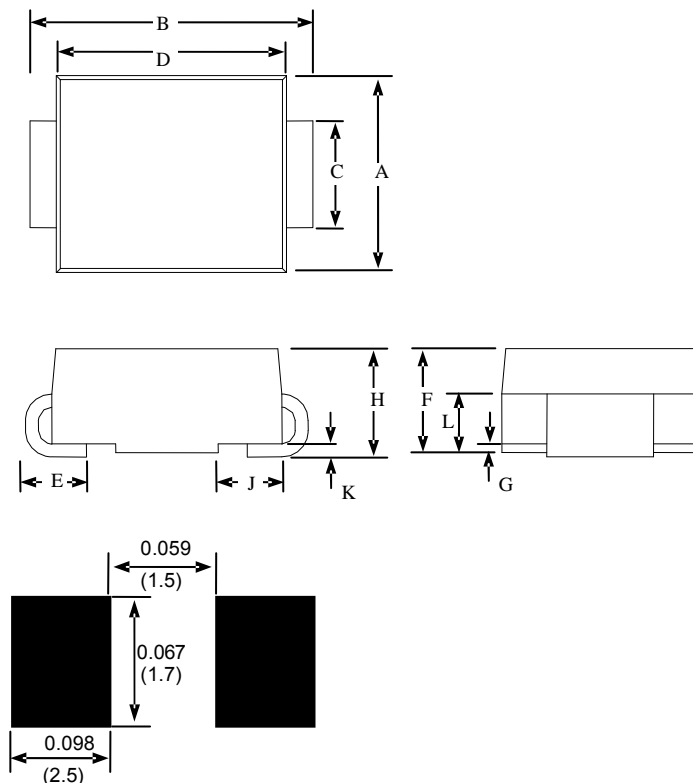
Fig 3. Total Capacitance

Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension(SMA)




DIMENSIONS ARE : INCHES  
(Millimeters)

Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.086	0.110	2.18	2.79
B	0.185	0.209	4.70	5.31
C	0.051	0.067	1.29	1.70
D	0.160	0.180	4.06	4.57
E	0.036	0.056	0.91	1.42
F	0.069	0.087	1.75	2.20
G	0.002	0.008	0.05	0.20
H	0.069	0.091	1.75	2.31
J	0.035	0.053	0.89	1.35
K	0.008	0.014	0.20	0.35
L	0.039	0.049	0.99	1.24

### Ordering information

Device	Package	Shipping
PSBDA20V1	SMA (Pb-Free)	5000 / Tape & Reel


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