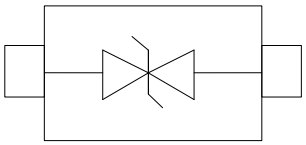
ECTHCCA15VB

Small Surface Mount TVS Diodes

Features

- Peak Power − 200 Watts @ 10×1000us waveform
- Glass passivated or planar junction
- Excellent clamping capability
- Repetition rate (duty cycle): 0.01%
- Low profile package and low inductance
- Fast response time: typically less than 1.0ps from 0V
- High temperature soldering: 260℃/10s at terminals.
- For surface mounted applications in order to optimize board space.
- Solid-state silicon avalanche technology
- ROHS compliant

SOD-123FL



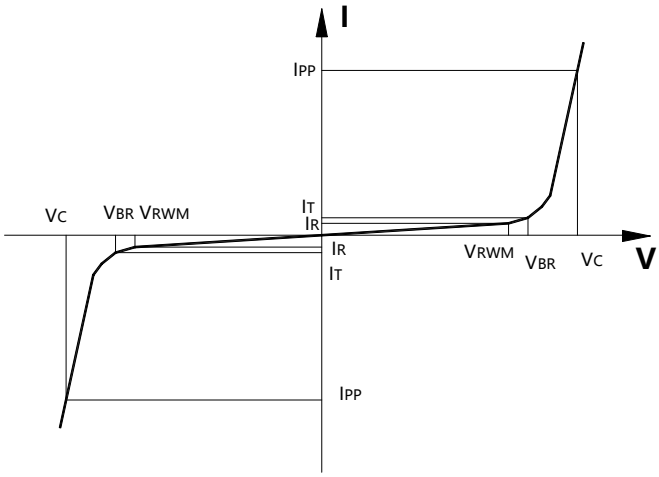
Ordering Information

Device	Qty per Reel	Reel Size
ECTHCCA15VB	3000	7 Inch

Maximum ratings (Tamb=25℃ Unless Otherwise Specified)			
Parameter	**Symbol**	**Value**	**Unit**
Peak pulse power dissipation on 10/1000us waveform	P_{PP}	200	Watts
Peak pulse current dissipation on 10/1000us waveform	I_{PP}	8.2	A
Lead Soldering Temperature	T_L	260 (10 sec.)	℃
Operating Temperature Range	T_J	150	℃
Storage Temperature Range	T_{STG}	-55 ~ 150	℃
Lead Solder Temperature − Maximum (10 Second Duration)	T_L	260	℃

Electrical characteristics (Tamb=25℃ Unless Otherwise Specified)									
Device	Marking	V_{RWM} (V)	V_{BR} @ IT (V)			I_T	I_R @ V_{RWM}	V_C@I_{PP} (Max)	I_{PP}(Max)
		(Note 5)	Min	Nom	Max	(mA)	(uA)	(V)	(A)
ECTHCCA15VB	15CA	15	16.7	17.60	18.5	1	1	24.4	8.2

Symbol	Parameter
V_{RWM}	Working Peak Reverse Voltage
V_{BR}	Breakdown Voltage @ I_T
V_C	Clamping Voltage @ I_{PP}
I_T	Test Current
I_R	Leakage current at V_{RWM}
I_{PP}	Peak pulse current



Typical electrical characterist applications

Figure 1: Peak Pulse Power Rating Curve

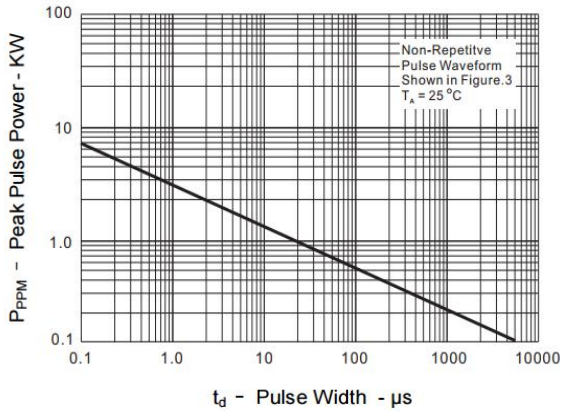


Figure 2: Pulse Derating Curve

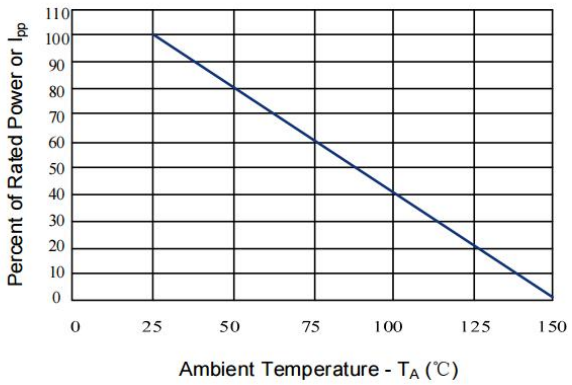


Figure 3: Pulse Waveform

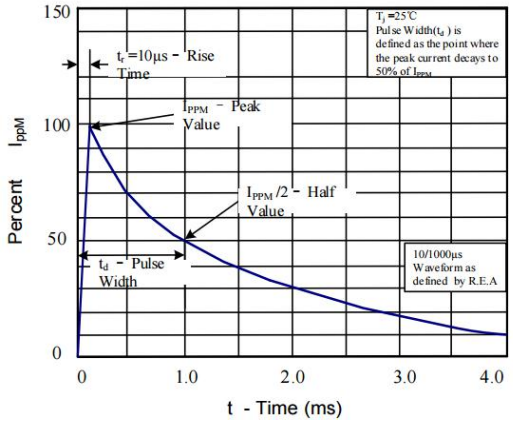


Figure 4: Typical Junction Capacitance

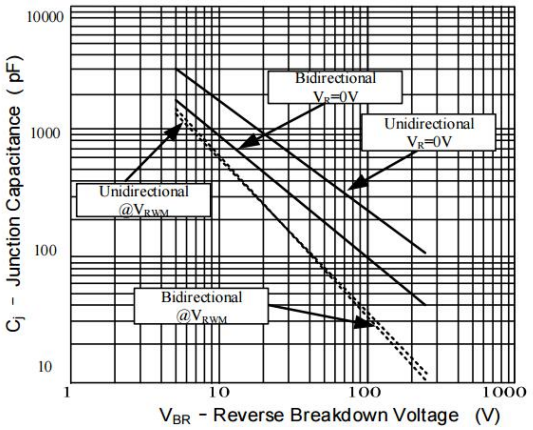


Figure 5: Steady State Power Dissipation Derating Curve

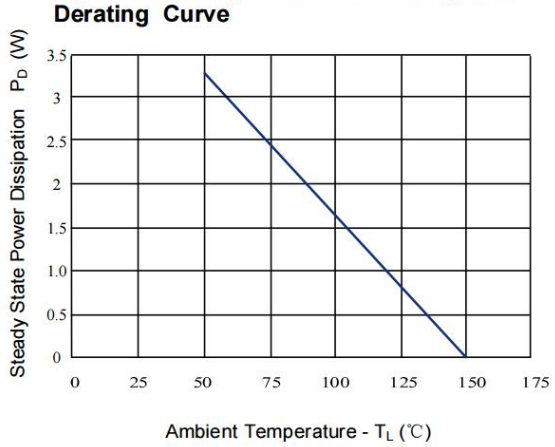
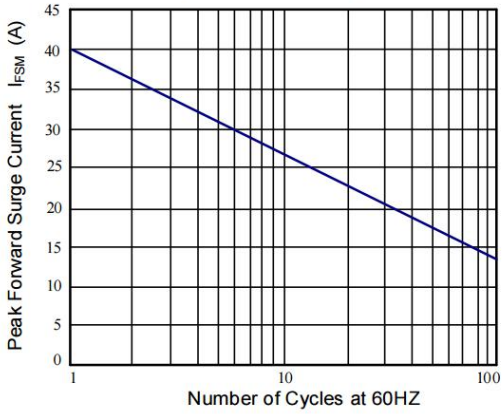


Figure 6: Maximum Non-Repetitive Forward Surge Current Only Unidirectional



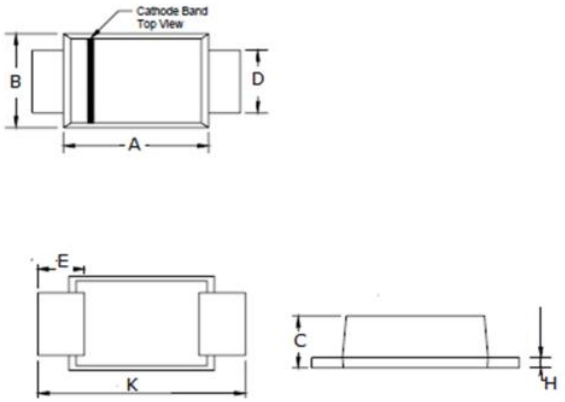
Package Information

SOD-123FL

Mechanical Data

Case:SOD-123F

Case Material: Molded Plastic. UL Flammability



Dim	Millimeters	
	Min	Max
A	2.50	2.90
B	1.50	1.90
C	0.095	1.20
D	0.70	1.20
E	0.35	0.85
H	0	0.1
K	3.40	3.90

Recommended Pad outline