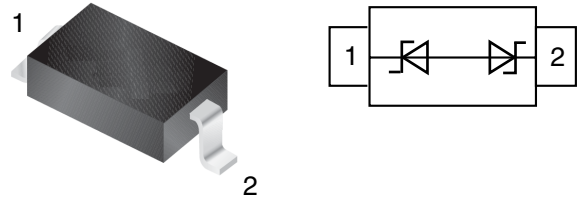


## Automotive TVS for BMS in SOD-323

### Features

- 220Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SOD-323 package
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- AEC Q101 qualified
- Medium capacitance ( $C_j = 15pF$  typ.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 5A (8/20 $\mu s$ )



### Mechanical Data

- **Case:** SOD-323 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- LIN Bus protection

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

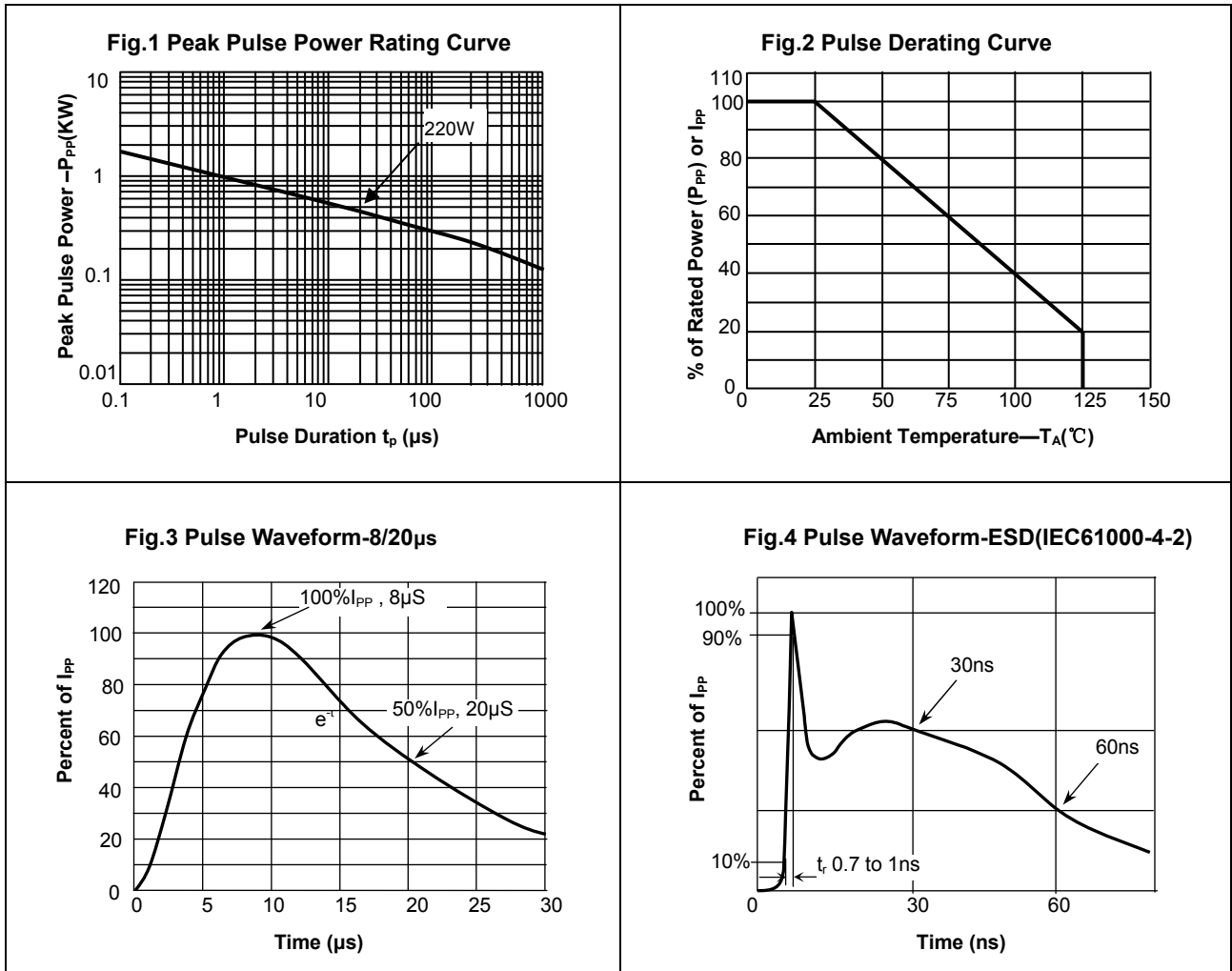
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P = 8/20\mu S$ )	$P_{PP}$	220	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current ( $t_P = 8/20\mu S$ )	$I_{PP}$	5	A
Junction Temperature	$T_J$	-55 to +150	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics

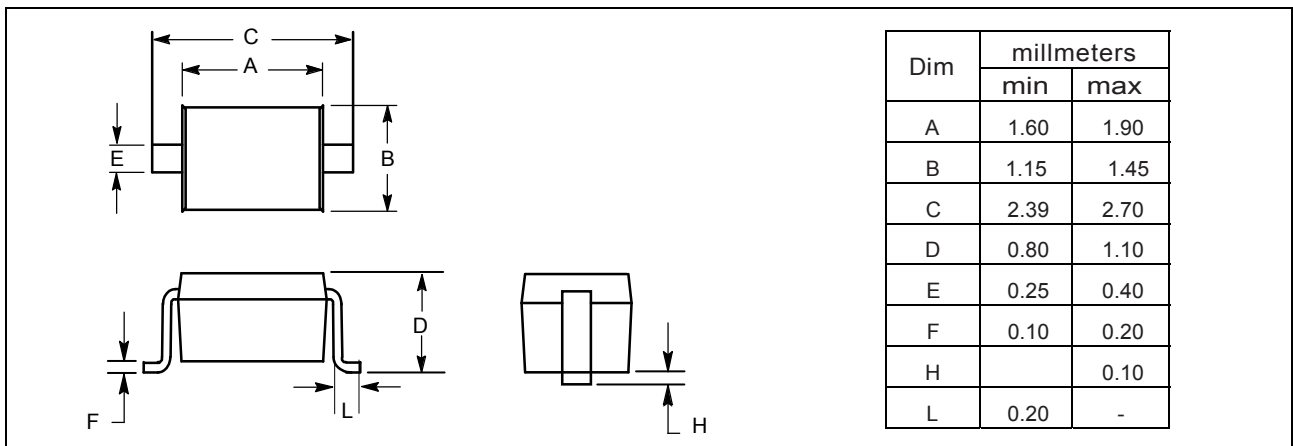
( $T_A = 25$  °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage(Pin 1 to Pin 2)	$V_{RWM1}$				15	V
Reverse stand-off Voltage(Pin 2 to Pin 1)	$V_{RWM2}$				24	V
Reverse Breakdown Voltage(Pin 1 to Pin 2)	$V_{BR1}$	$I_T = 1mA$	16.7			V
Reverse Breakdown Voltage(Pin 2 to Pin 1)	$V_{BR2}$	$I_T = 1mA$	26.7			V
Reverse Leakage Current(Pin 1 to Pin 2)	$I_{R1}$	$V_R = 15V$			1	$\mu A$
Reverse Leakage Current(Pin 2 to Pin 1)	$I_{R2}$	$V_R = 24V$			1	$\mu A$
Clamping Voltage (IEC 61000-4-5)(Pin 1 to Pin 2)	$V_{C1}$	$I_{PP} = 5A$		26		V
Clamping Voltage (IEC 61000-4-5)(Pin 2 to Pin 1)	$V_{C2}$	$I_{PP} = 5A$		44		V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		15		pF

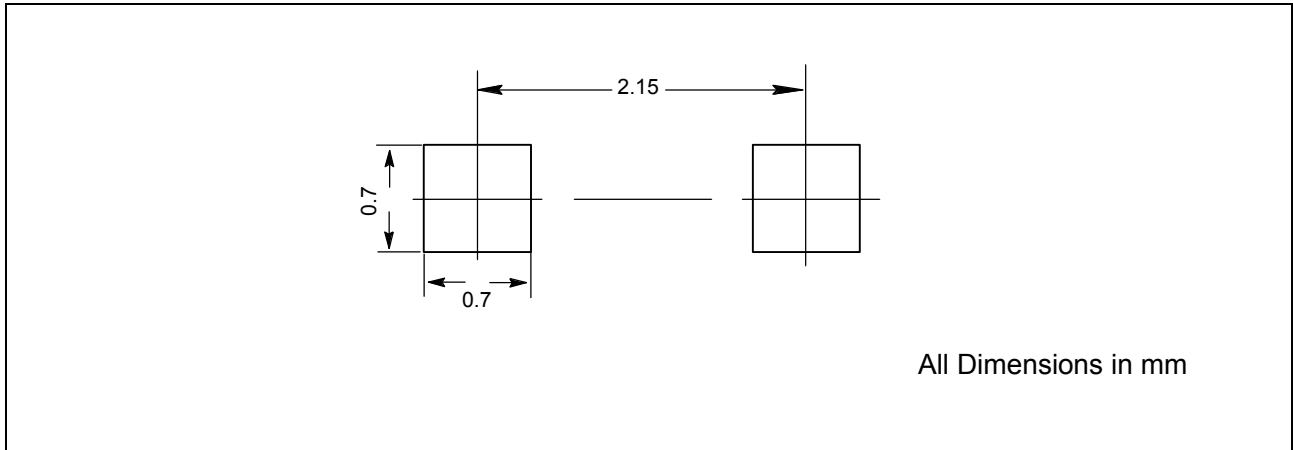
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



**Package Dimensions**



## Pad Dimensions



## Marking



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD323CA1524B	SOD-323	Tape and reel	3000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2018	1.0	Initial release

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