

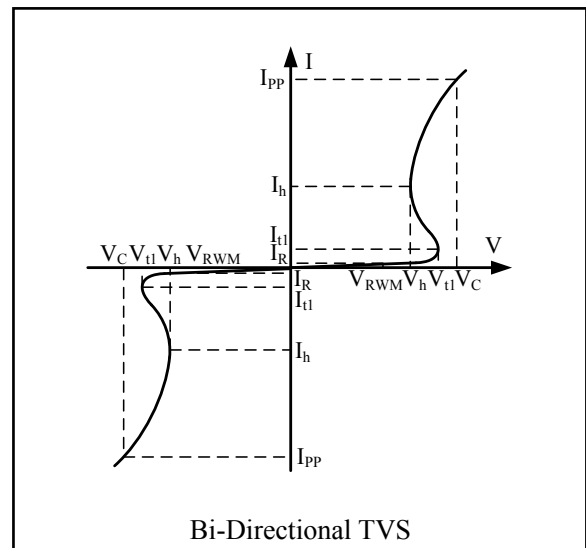


## Absolute Maximum Rating

Symbol	Parameter	Value	Units
$P_{PK}$	Peak Pulse Power (8/20 $\mu$ s)	350	Watts
$V_{ESD}$	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$\pm 30$ $\pm 30$	kV
$T_{OPT}$	Operating Temperature	-55 to +150	C
$T_{STG}$	Storage Temperature	-55 to +150	$^{\circ}$ C
$T_{LST}$	Lead Soldering Temperature	260	$^{\circ}$ C

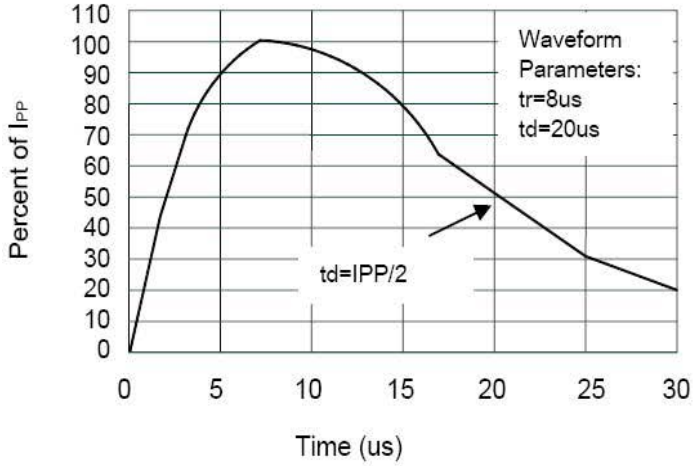
## Electrical Characteristics (T = 25 $^{\circ}$ C)

Symbol	Parameter
$V_{RWM}$	Nominal Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{t1}$	Trigger Voltage
$I_{t1}$	Trigger Current @ $V_{t1}$
$V_h$	Holding Voltage
$I_h$	Holding Current @ $V_h$
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Maximum Peak Pulse Current
$C_{ESD}$	Parasitic Capacitance
$C_{\Delta}$	Variation in $C_{ESD}$ with Reverse Bias

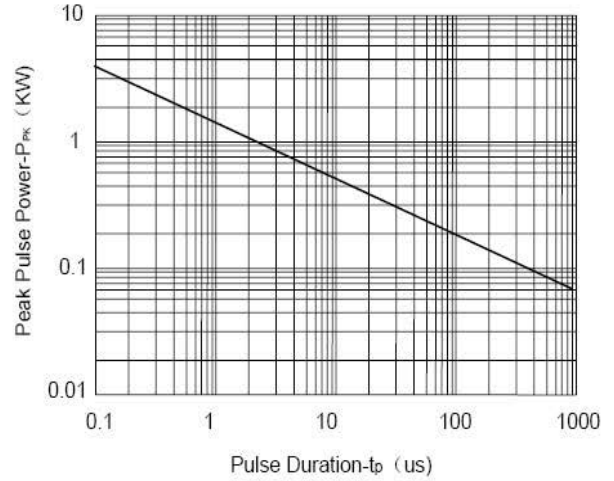


Symbol	Test Condition	Minimum	Typical	Maximum	Units
$V_{RWM}$				3.3	V
$I_R$	$V_{RWM} = 3.3V, T = 25^{\circ}C$		0.01	0.05	$\mu$ A
$V_{t1}$	$I_{t1} = 1\mu A$	6.0		7.5	V
$V_h$	$I_h = 1mA$	3.5		4.5	V
$V_C$	$I_{PP} = 2A, t_p = 8/20\mu s$			7.0	V
$V_C$	$I_{PP} = 20A, t_p = 8/20\mu s$			16.0	V
$C_{ESD}$	$V_R = 3.3V, f = 1MHz$		4.0		pF
$C_{\Delta}$	$V_R = 0V \sim 3.3V, f = 1MHz$		0.6		pF

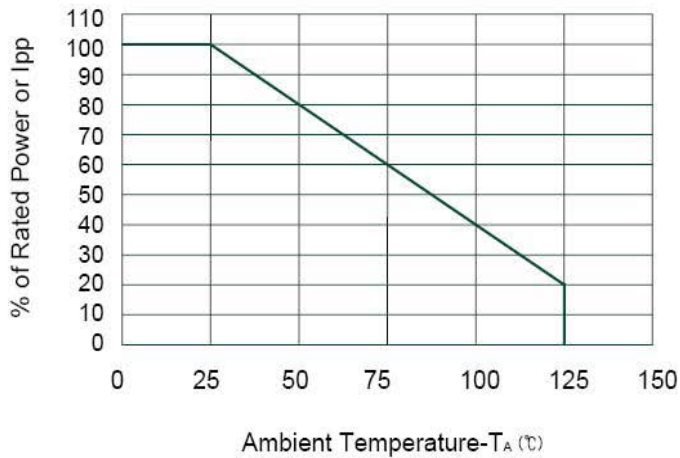
### Electrical Characteristics Curve



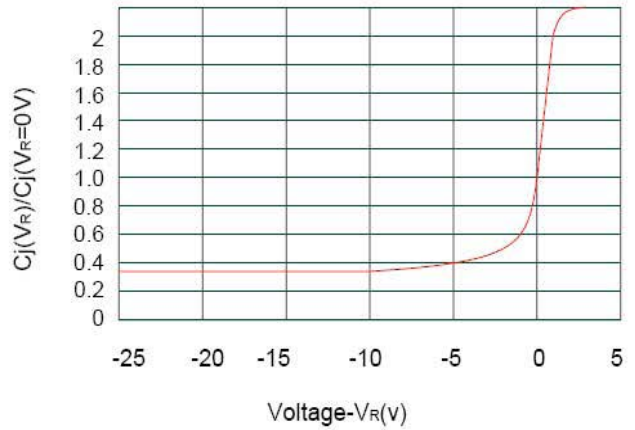
**Pulse Waveform**



**Non-Repetitive Peak Pulse Power vs. Pulse Time**



**Power Derating Curve**



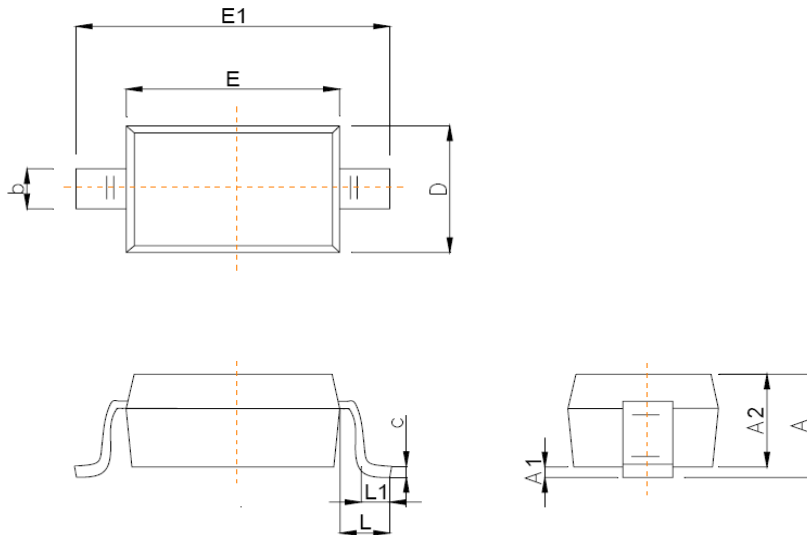
**Junction Capacitance vs. Reverse Voltage**

## Package Outline

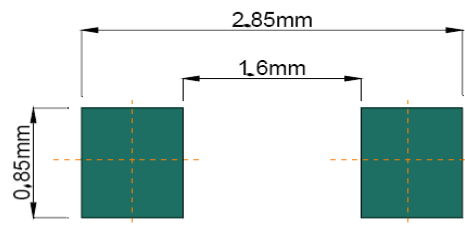
□ SOD-323 package



## Package Outline Dimensions

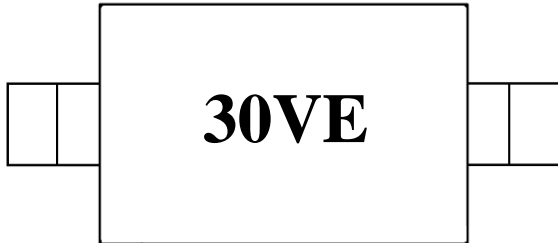


Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



**Recommended Pad outline**

### Marking Codes



**Note:**

(1) 30VE is the Part Number, fixed.

### Ordering Information

Part Number	Working Voltage	Quantity Per Reel	Reel Size
TS0301VEX	3.3V	3,000	7 Inch