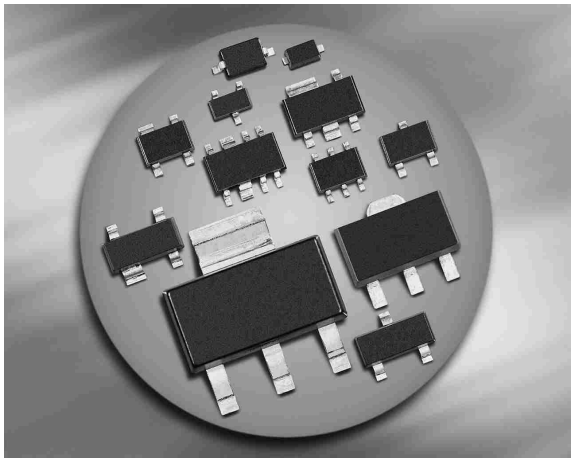
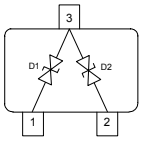
Dual Channel TVS Diode

- ESD / transient protection for
  data and power lines to
  IEC61000-4-2 (ESD): ± 15 KV (contact)
  IEC61000-4-4 (EFT): 40 A (5/50 ns)
- Working voltage: -8 / +14 V
- Low capacitance
- Low reverse current



ESD8V0L2B-03L



Type	Package	Configuration	Marking
ESD8V0L2B-03L*	TSLP-3-1	2 channel, bi-directional	B3

* Preliminary data

Maximum Ratings at T_A = 25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
ESD contact discharge[1)]	V_{ESD}	15	kV
Peak pulse current (t_p = 8 / 20 µs)[2)]	I_{pp}	1	A
Operating temperature range	T_{op}	-55...125	°C
Storage temperature	T_{stg}	-65...150	

Thermal Resistance

Parameter	Symbol	Value	Unit
Junction - soldering point[3)]	R_{thJS}	≤ tbd	K/W

[1] V_{ESD} according to IEC61000-4-2

[2] I_{pp} according to IEC61000-4-5

[3] For calculation of R_{thJA} please refer to Application Note Thermal Resistance

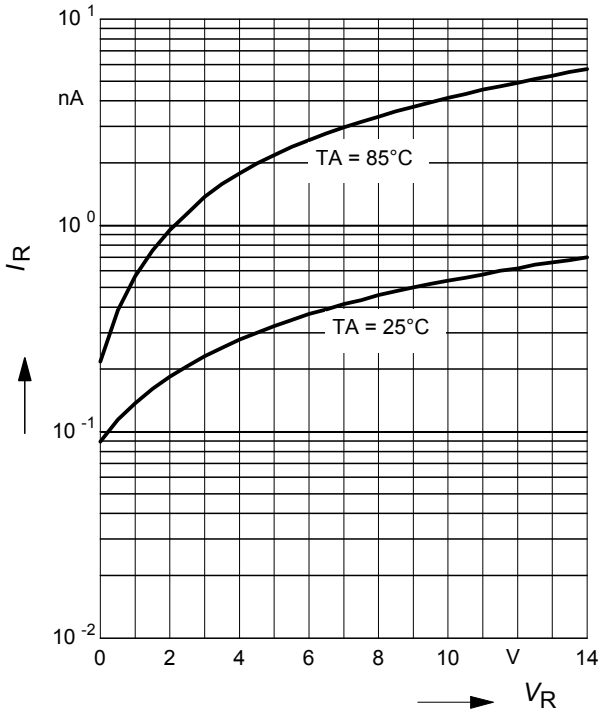
Electrical Characteristics at T_A = 25°C, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Characteristics					
Reverse working voltage	V_{RWM}	-8	-	14	V
Breakdown voltage	$V_{(BR)}$				
$I_{(BR)}$ = 1 mA, from pin 1 or 2 to pin 3		14.5	-	-	
$I_{(BR)}$ = 1 mA, from pin 3 to pin 1 or pin 2		8.5	-	-	
Reverse current	I_R	-	< 1	100	nA
V_R = 3 V, between all pins					
Clamping voltage	V_{CL}				V
V_{ESD} = +15 kV (contact)[1)]		-	26	-	
V_{ESD} = -15 kV (contact)[1)]		-	20	-	
Diode capacitance	C_T	-	4	7	pF
V_R = 0 V, f = 1 MHz, from pin 1 or pin 2 to pin 3					

[1] V_{ESD} according to IEC61000-4-2

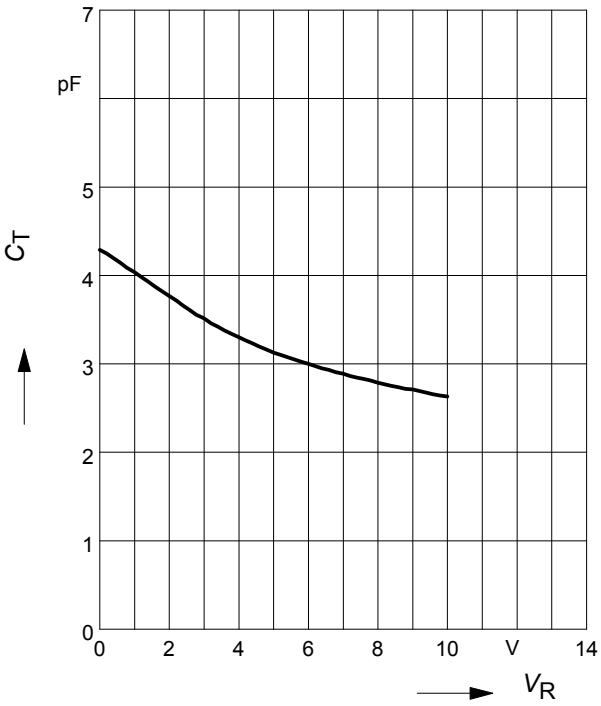
Reverse current $I_R = f(V_R)$

T_A = Parameter

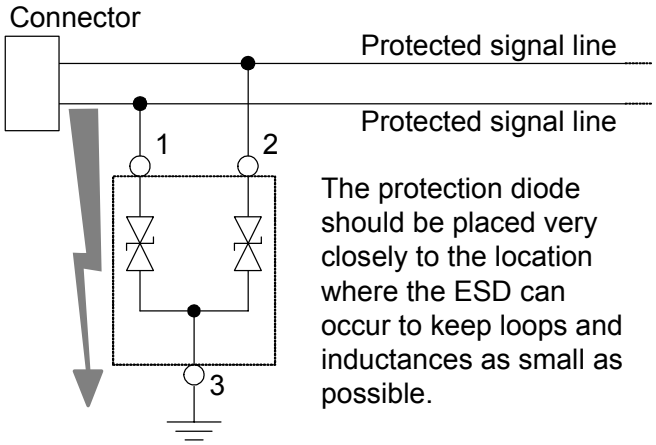


Diode capacitance $C_T = f(V_R)$

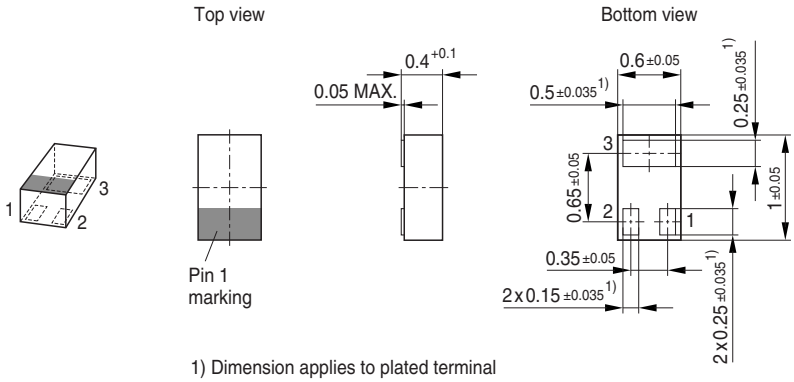
f = 1MHz



Application example ESD8V0L2B-03L
2 channel, bi-directional



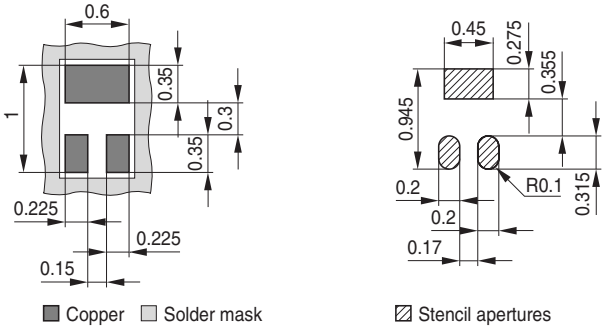
Package Outline



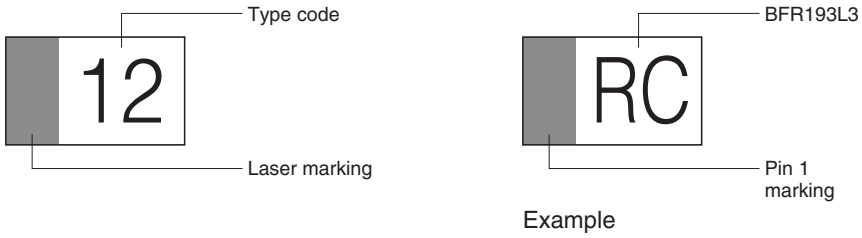
1) Dimension applies to plated terminal

Foot Print

For board assembly information please refer to Infineon website "Packages"

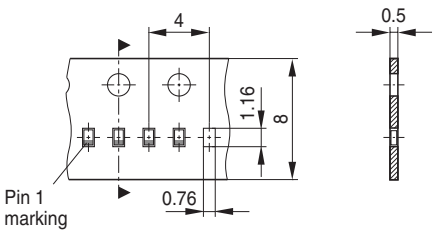


Marking Layout



Standard Packing

Reel ø180 mm = 15.000 Pieces/Reel



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