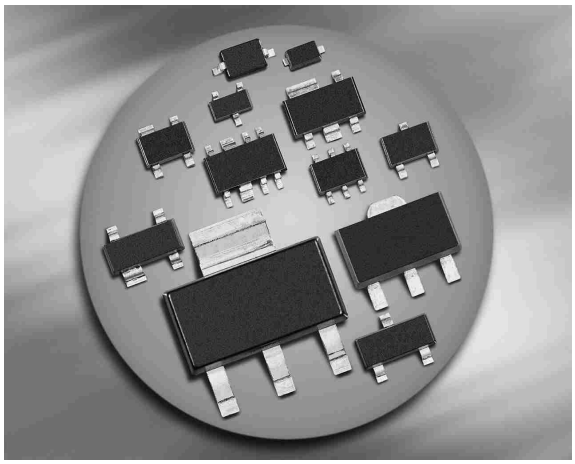
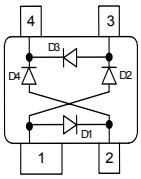
Silicon TVS diodes Array



- ESD / transient protection of e.g. ADSL, VDSL, ISDN, WAN, LAN, I²C Bus, Microcontroller Inputs, Video and other high-speed data lines in telecom applications:
  IEC61000-4-2 (ESD): ± 15 kV (Air / Contact)
  IEC61000-4-4 (EFT): 4 kV / 80 A (5/50 ns)
  IEC61000-4-5 (Lightning): 27 A (8/20 µs)
- Very low capacitance
- Extremly low reverse current < 5 nA
- Pb-free (RoHS compliant) package

RoHS

DSL70



Type	Package	Configuration	Marking
DSL70	SOT143	2 channel, rail to rail	E4s

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

Parameter	Symbol	Value	Unit
ESD contact discharge per diode[1)]	V_{ESD}	15	kV
Peak pulse current (t_p = 8 / 20 µs)[2)]	I_{pp}	27	A
Peak pulse power (t_p = 8 / 20 µs)	P_{pk}	245	W
Operating temperature range	T_{op}	-55...125	°C
Storage temperature	T_{stg}	-65...150	

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

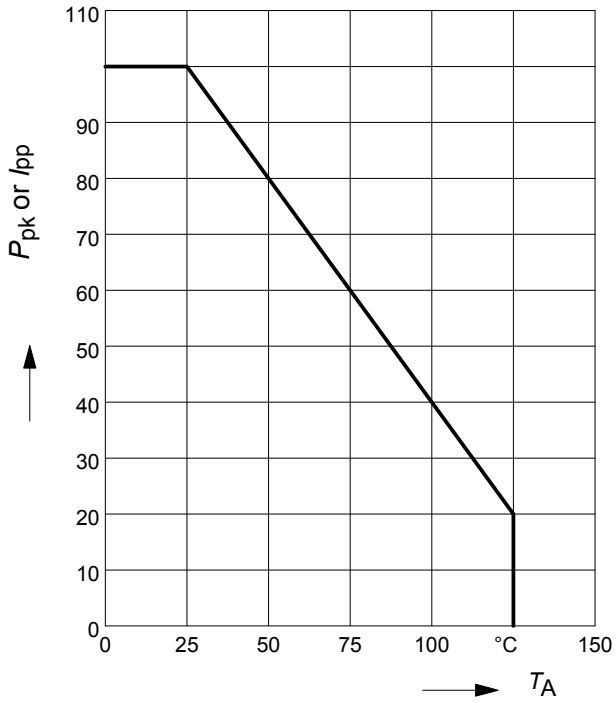
[2] I_{pp} according to IEC61000-4-5

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Characteristics -					
Reverse working voltage	V_{RWM}	-	-	50	V
Reverse current V_R = 50 V	I_R	-	-	5	nA
Forward clamping voltage[1)]	V_{FC}				V
I_{PP} = 1 A, t_P = 8/20 µs		-	1	1.5	
I_{PP} = 10 A, t_P = 8/20 µs		-	2.5	3	
I_{PP} = 24 A, t_P = 8/20 µs		-	5	6	
I_{PP} = 27 A, t_P = 8/20 µs		-	6	9	
Diode capacitance	C_T				pF
V_R = 0 V, f = 1 MHz, between I/0 and GND		-	2.5	5	
V_R = 0 V, f = 1 MHz, between I/0 pins		-	1.25	2.5	

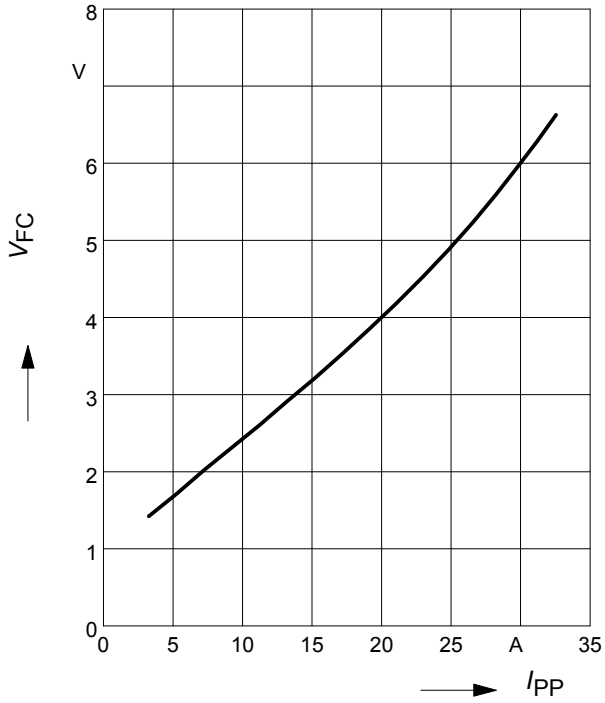
[1] I_{PP} according to IEC61000-4-5

Power derating curve $P_{pk} = f(T_A)$



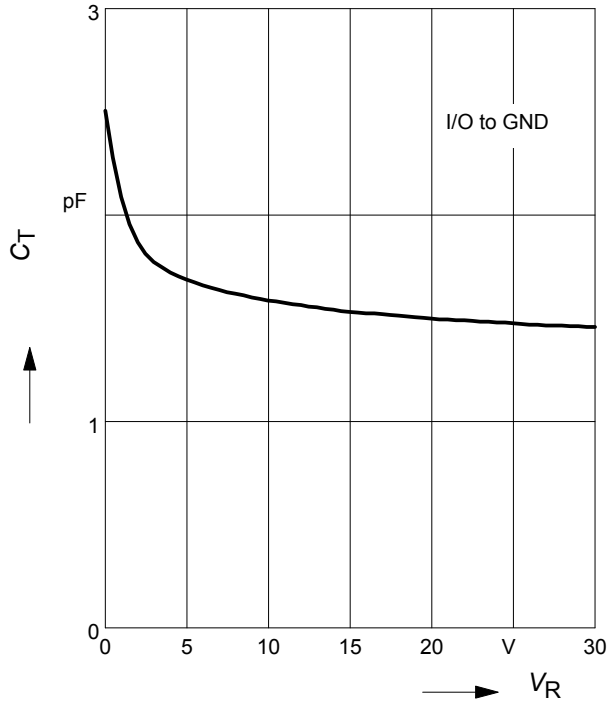
Forward clamping voltage $V_{FC} = f(I_{PP})$

t_p = 8 / 20 µs

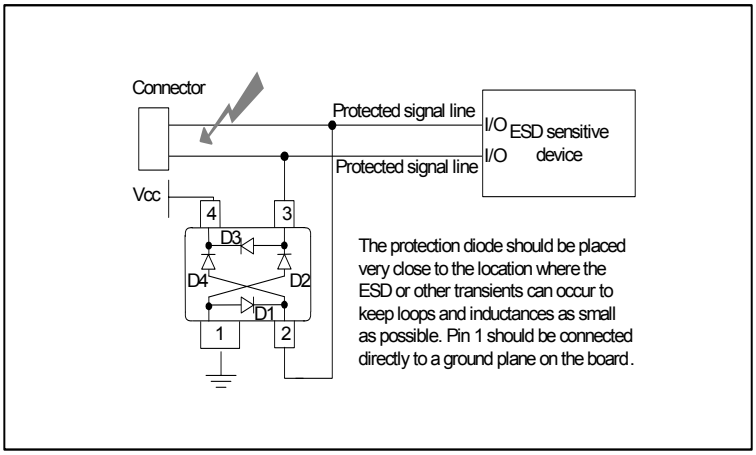


Diode capacitance $C_T = f(V_R)$

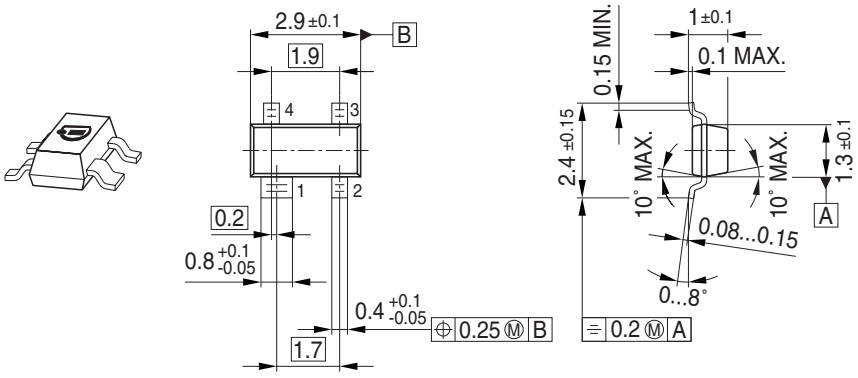
f = 1MHz



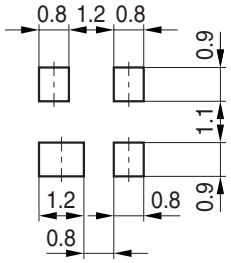
Application example DSL70
dual channel, rail to rail configuration



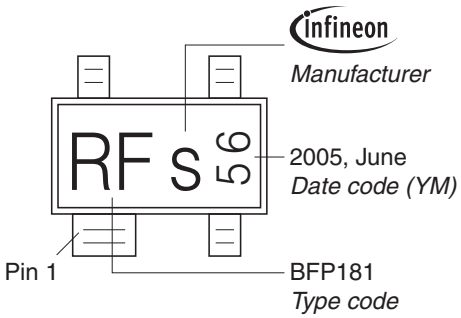
Package Outline



Foot Print

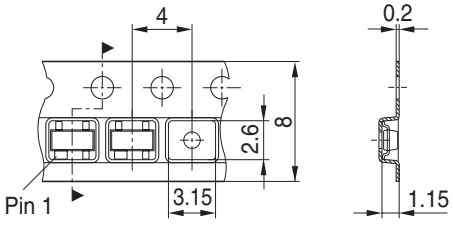


Marking Layout (Example)



Standard Packing

Reel ø180 mm = 3.000 Pieces/Reel
Reel ø330 mm = 10.000 Pieces/Reel



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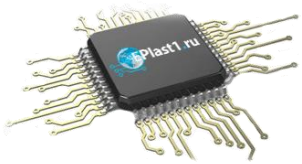
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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