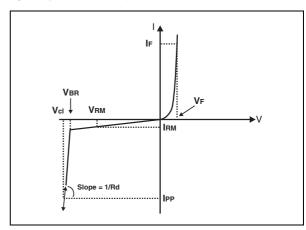
Table 2: Absolute Maximum Ratings $(T_{amb} = 25^{\circ}C)$

Symbol	Р	Value	Unit	
V _{PP}	ESD discharge	MIL STD 883E - Method 3015-7 IEC61000-4-2 air discharge IEC61000-4-2 contact discharge	25 20 15	kV
P _{PP}	Peak pulse power (8/20µs)	100	W	
Tj	Junction temperature	150	°C	
T _{stg}	Storage temperature range	-55 to +150	°C	
TL	Maximum lead temperature for case	260	°C	
T _{op}	Operating temperature range	-40 to +125	°C	

Note 1: The evolution of the operating parameters versus temperature is given by curves and αT parameter.

Table 3: Electrical Characteristics $(T_{amb} = 25^{\circ}C)$

Symbol	Parameter				
V_{RM}	Stand-off voltage				
V_{BR}	Breakdown voltage				
V_{CL}	Clamping voltage				
I _{RM}	Leakage current				
I_{PP}	Peak pulse current				
αΤ	Voltage temperature coefficient				
V_{F}	Forward voltage drop				
С	Capacitance				
R_d	Dynamic resistance				



	V	/ _{BR} @	I _R	I _{RM} @	V _{RM}	R _d	αT	С	V _F @	9 I _F
Time	min.	max.		max.		typ.	max.	typ.	max.	
Туре						note 2	note 3	0V bias		
	V	V	mA	μΑ	V	mΩ	10 ⁻⁴ /°C	pF	V	mA
ESDA6V1-5SC6	6.1	7.2	1	1	3	590	6	50	1.25	200

Note 2: Square pulse, Ipp = 15A, t_p =2.5 μ s.

Note 3: Δ V_{BR} = α T* (T_{amb} -25°C) * V_{BR} (25°C).

Figure 3: Peak power dissipation versus initial junction temperature

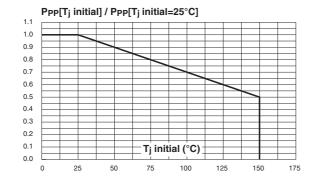
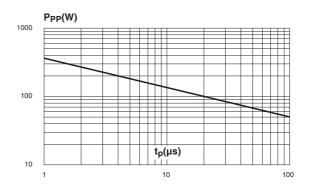


Figure 4: Peak pulse power versus exponential pulse duration (T_j initial = 25 °C)



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Figure 5: Clamping voltage versus peak pulse current (T_j initial = 25 °C). Rectangular waveform (t_p = 2.5 μ s)

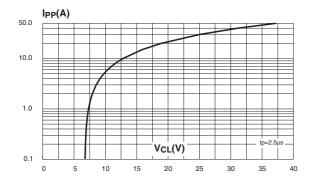


Figure 6: Capacitance versus reverse applied voltage (typical values)

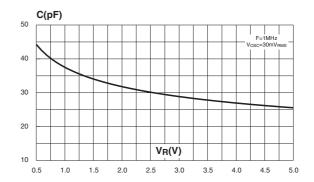
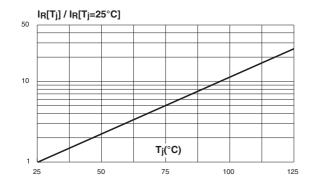


Figure 7: Relative variation of leakage current versus junction temperature (typical values)

Figure 8: Peak forward voltage drop versus peak forward current (typical values)



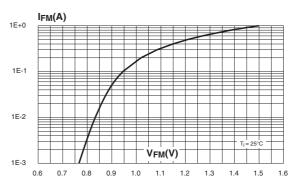
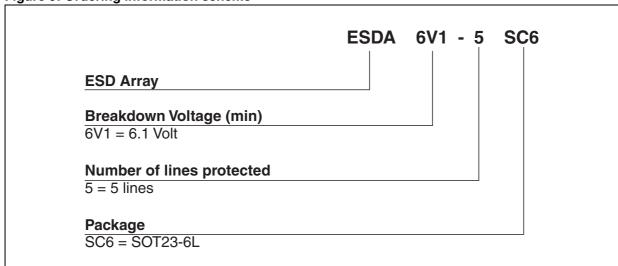
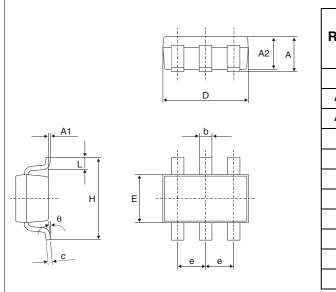


Figure 9: Ordering information scheme



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Figure 10: SOT23-6L Package Mechanical Data



	DIMENSIONS						
REF.	Mi	llimete	rs	Inches			
	Min.	Тур.	Max.	Min.	Тур.	Max.	
Α	0.90		1.45	0.035		0.057	
A1	0		0.10	0		0.004	
A2	0.90		1.30	0.035		0.051	
b	0.35		0.50	0.014		0.02	
С	0.09		0.20	0.004		0.008	
D	2.80		3.05	0.110		0.120	
Е	1.50		1.75	0.059		0.069	
е		0.95			0.037		
Н	2.60		3.00	0.102		0.118	
L	0.10		0.60	0.004		0.024	
θ			10°			10°	

Figure 11: Foot Print Dimensions (in millimeters)

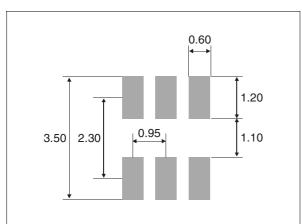


Table 4: Ordering Information

Part Number	Marking	Package	Weight	Base qty	Delivery mode
ESDA6V1-5SC6	EC62	SOT23-6L	16.7 mg	3000	Tape & reel

Table 5: Revision History

Date	Revision	Description of Changes
Feb-2002	2B	Last update.
4-Nov-2004	3	SOT23-6L package dimensions change for reference "D" from 3.0 millimeters (0.118 inches) to 3.05 millimeters (0.120 inches).

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