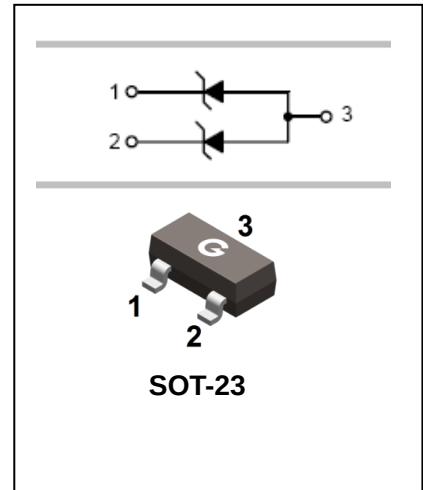


DUAL TRANSIL ARRAY FOR ESD PROTECTION ESDAXXL

FEATURES

- 2 unidirectional transil functions
- Low leakage current
- 300W peak pulse power (8/20us)
- High integration

HF



APPLICATIONS

- Transient overvoltage protection capability

ORDERING INFORMATION

Type No.	Marking	Package Code
ESDA5V3L	See Table on page2	SOT-23
ESDA6V1L	See Table on page2	SOT-23
ESDA14V2L	See Table on page2	SOT-23
ESDA25L	See Table on page2	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Electrostatic discharge			
MIL STD 883C-Method 3015-6	V_{PP}	25	KV
IEC61000-4-2 air discharge		16	
IEC61000-4-2 contact discharge		9	
Peak pulse power	P_{PP}	300	W
Operating temperature range	T_{OP}	-40 to +125	°C
Maximum lead temperature for soldering during 10s	T_L	260	°C
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	°C

DUAL TRANSIL ARRAY FOR ESD PROTECTION ESDAXXL

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Types	Device Marking	V _{RM}	I _{RM} @ V _{RM}	Breakdown voltage			Dynamic resistance	Voltage temperature coefficient	Capacitance	V _F @I _F max	
				V _{BR} (V)		@I _R					
		V	μA	Min	Max	mA	mΩ	10 ⁻⁴ /°C	pF	V	mA
ESDA5V3L	EL53	3	2	5.3	5.9	1	280	5	220	1.25	200
ESDA6V1L	EL61	5.25	20	6.1	7.2	1	350	6	140	1.25	200
ESDA14V2L	EL15	12	5	14.2	15.8	1	650	10	90	1.25	200
ESDA25L	EL25	24	1	25	30	1	1000	10	50	1.2	10

Note1: Square pulse I_{PP}=15A, t_p=2.5μs

Note2: ΔV_{BR}=At(T_{amb}-25°C)*V_{BR}(25°C)

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Fig. 1: Peak power dissipation versus initial junction temperature.

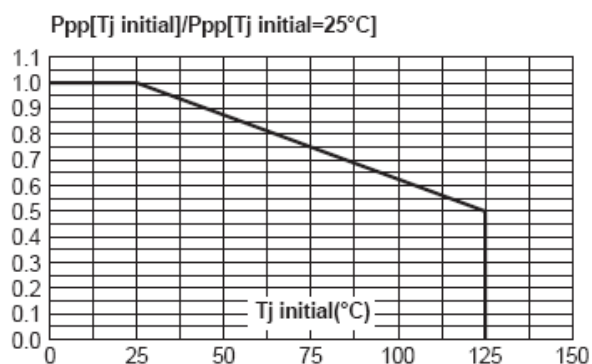
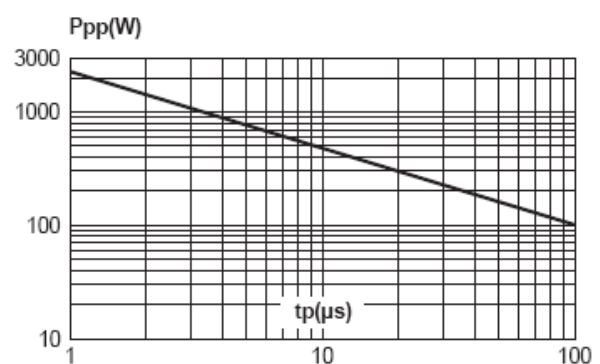


Fig. 2: Peak pulse power versus exponential pulse duration (T_{j initial} = 25 °C).



DUAL TRANSIL ARRAY FOR ESD PROTECTION

ESDAXXL

Fig. 3: Clamping voltage versus peak pulse current (T_j initial = 25 °C). Rectangular waveform $t_p = 2.5 \mu s$.

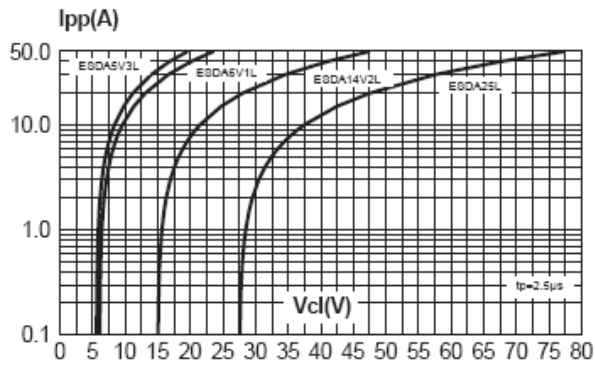


Fig. 4: Capacitance versus reverse applied voltage (typical values).

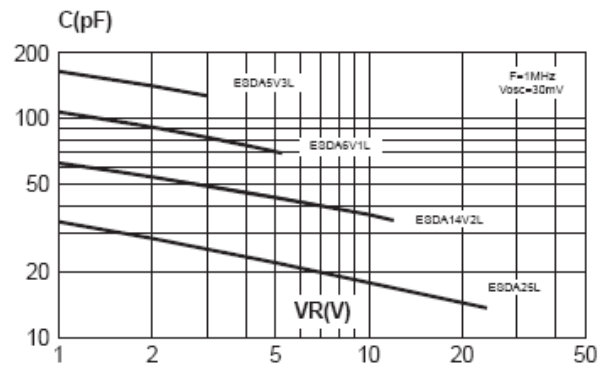


Fig. 5: Relative variation of leakage current versus junction temperature (typical values).

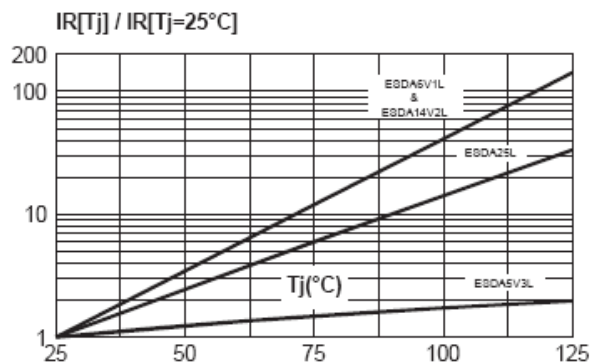
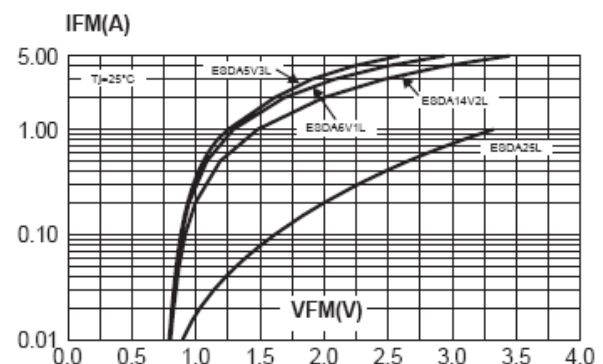


Fig. 6: Peak forward voltage drop versus peak forward current (typical values).

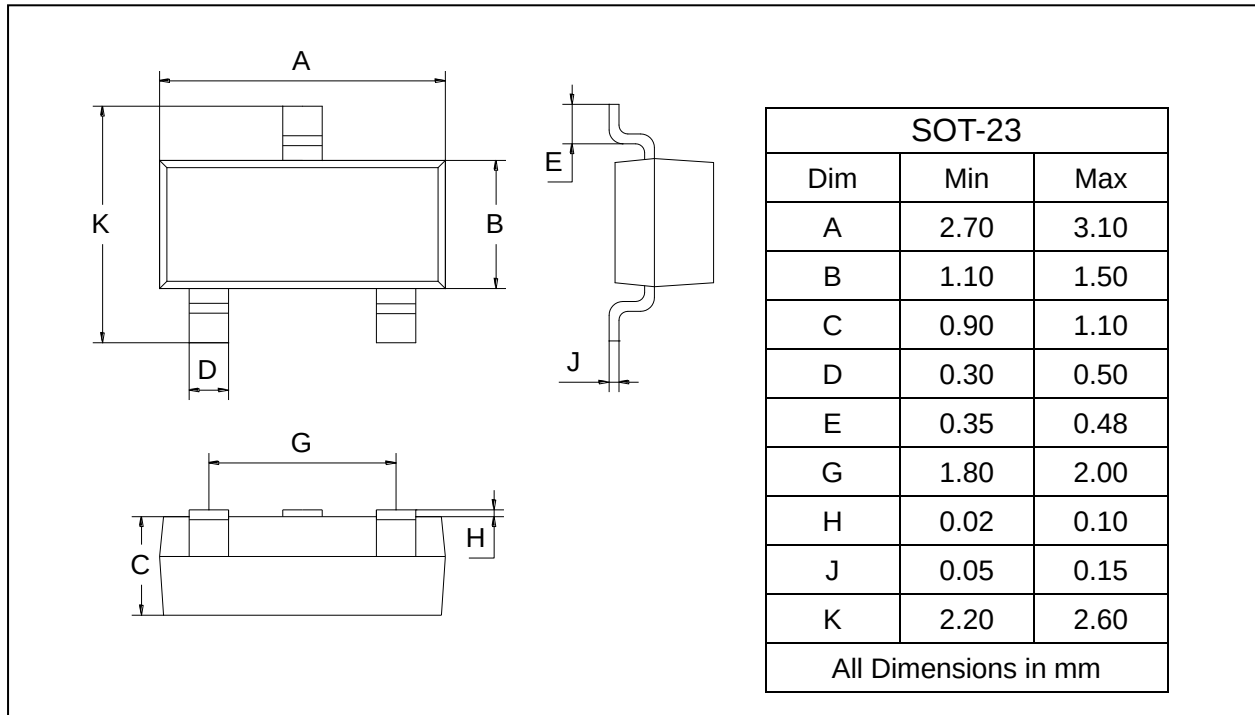


DUAL TRANSIL ARRAY FOR ESD PROTECTION ESDAXXL

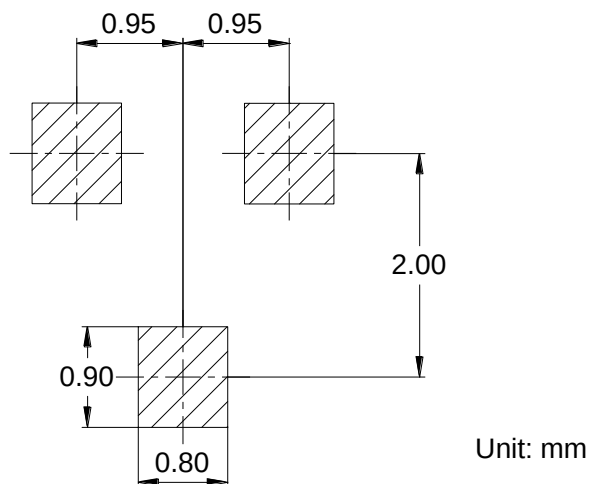
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
ESDAXXL	SOT-23	3000 pcs / Tape & Reel