

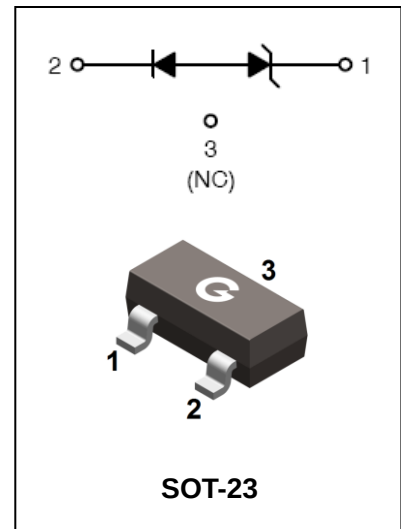
TVS Diode Array

SL05-SL24

FEATURES

- TVS diode in series with a compensating diode offers <5 pF capacitance
- ESD protection meeting IEC 61000-4-2, 4-4, 4-5
- Peak power rating of 300W
- Bi-direction protection can be achieved by using two devices

HF



APPLICATIONS

- Cellular Handsets and Accessories
- Portable Electronics
- Industrial Controls

ORDERING INFORMATION

Type No.	Marking	Package Code
SL05	L05	SOT-23
SL12	L12	SOT-23
SL15	L15	SOT-23
SL24	L24	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
P _{PK}	Peak Pulse Power(tp=8/20us)	300	W
V _{PP}	IEC 61000-4-2 Level 4 Contact Discharge	±8	kV
	Air Discharge	±16	kV
	IEC 61000-4-4 EFT	40	A
	IEC 61000-4-5 Lightning	12	A
R _{θJA}	Thermal Resistance Junction-to-Air *1	364	°C/W
R _{θJC}	Thermal Resistance Junction-to-Case *1	193	°C/W
R _{θJL}	Thermal Resistance Junction-to-Lead *1	154	°C/W
P _D	Total Power Dissipation	225	mW
T _L	Lead Soldering Temperature – Maximum (10 Second Duration)	260	°C
T _J	Operating Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Note 1: The data tested by surface mounted on a 15mm * 15mm * 1mm FR4-epoxy P.C.B

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Device	V_{RWM}	I_R @ V_{RWM}	Breakdown Voltage		VC, Clamping Voltage		Max I_{PP}	Capacitance	
			V_{BR} @ 1 mA (Volts)		@ 1 A	@ 5 A		@ $V_R = 0$ V, 1 MHz (pF)	
	(V)	(μ A)	Min	Max	(V)	(V)	(A)	Typ	Max
SL05	5.0	20	6.0	8.0	9.8	11	17	3.5	5.0
SL12	12	1.0	13.3	15.5	19	24	12	3.5	5.0
SL15	15	1.0	16.7	18.5	24	30	10	3.5	5.0
SL24	24	1.0	26.7	29	43	55	5.0	3.5	5.0

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

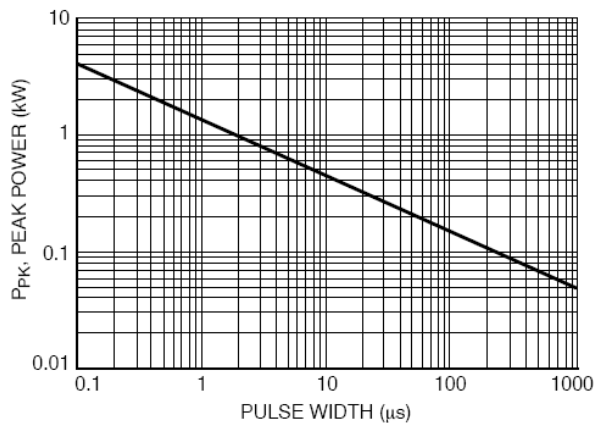


Figure 1. Maximum Peak Power Rating

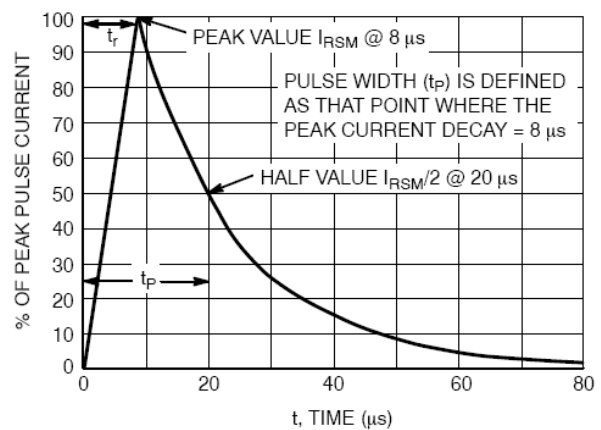


Figure 2. 8 x 20 μ s Pulse Waveform

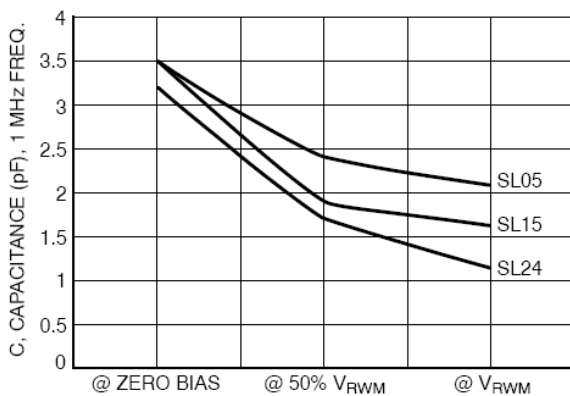


Figure 3. Typical Junction Capacitance

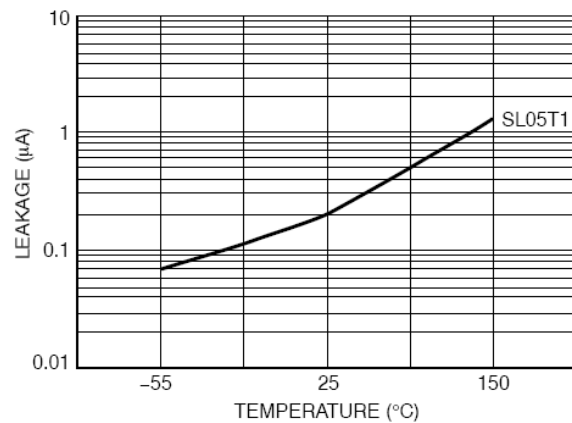


Figure 4. Typical Leakage Over Temperature

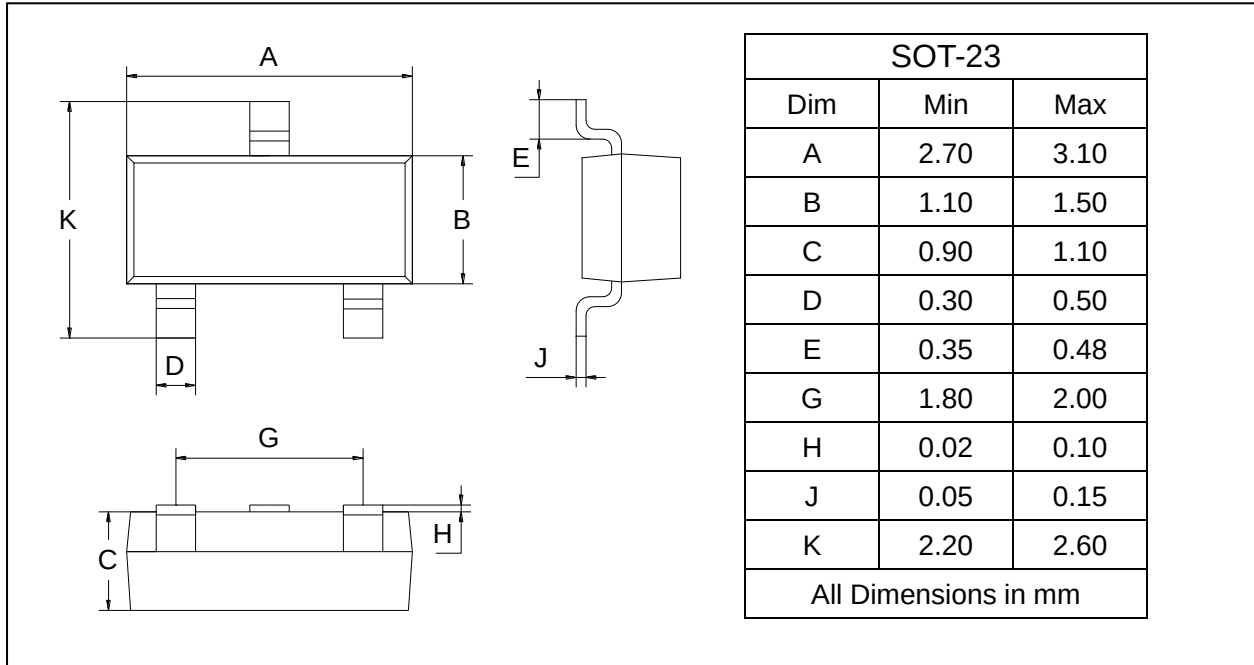
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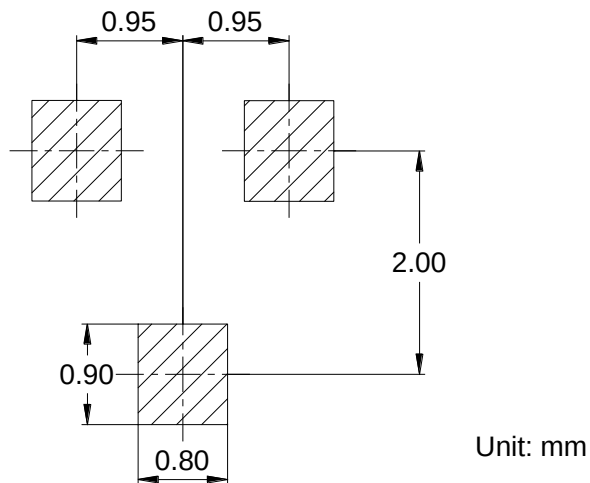
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
SL05-SL24	SOT-23	3000 pcs / Tape & Reel