

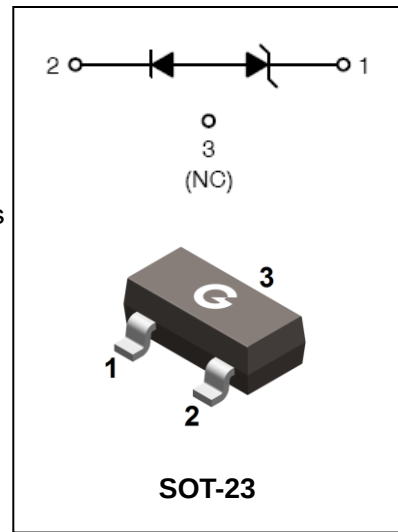
TVS DIODE ARRAY

TSL05-TSL24

FEATURES

- TVS Diode in Series with a Compensating Diode
Offers <5 pF Capacitance
- E SD 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
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



APPLICATIONS

- Cellular Handsets and Accessories
- Portable Electronics
- Industrial Controls

ORDERING INFORMATION

Type No.	Marking	Package Code
TSL05	L05	SOT-23
TSL12	L12	SOT-23
TSL15	L15	SOT-23
TSL24	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 Ambient	556	°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

TVS DIODE ARRAY

TSL05-TSL24

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Device	V_{RWM}	$I_R @ V_{RWM}$	Breakdown Voltage		VC, Clamping Voltage		Max I_{PP}	Capacitance	
			$V_{BR} @ 1 \text{ mA}$ (Volts)		@ 1 A	@ 5 A		@ $V_R = 0 \text{ V}$, 1 MHz (pF)	
	(V)	(μA)	Min	Max	(V)	(V)	(A)	Typ	Max
TSL05	5.0	20	6.0	8.0	9.8	11	17	3.5	5.0
TSL12	12	1.0	13.3	15.5	19	24	12	3.5	5.0
TSL15	15	1.0	16.7	18.5	24	30	10	3.5	5.0
TSL24	24	1.0	26.7	29	43	55	5.0	3.5	5.0

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

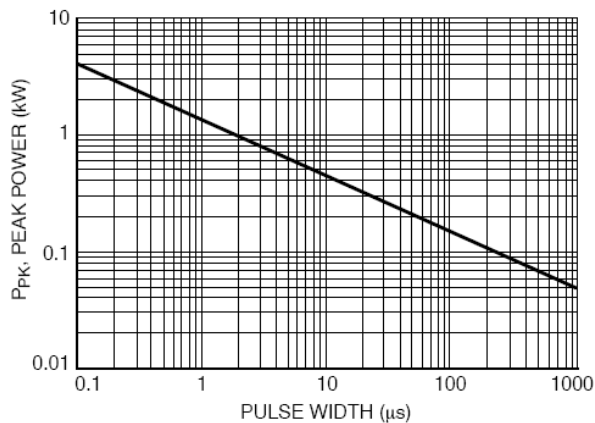


Figure 1. Maximum Peak Power Rating

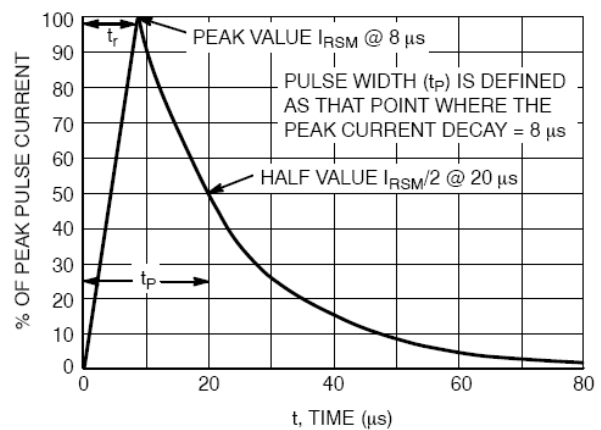


Figure 2. 8 x 20 μs Pulse Waveform

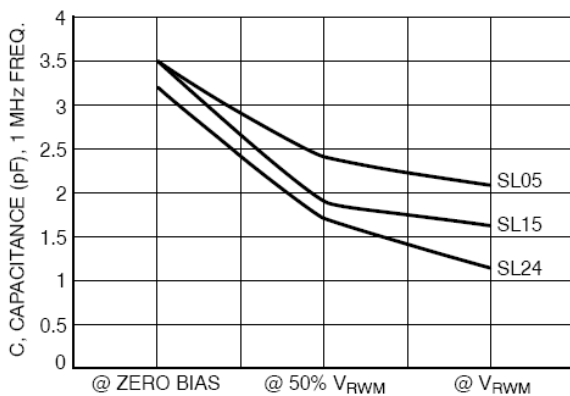


Figure 3. Typical Junction Capacitance

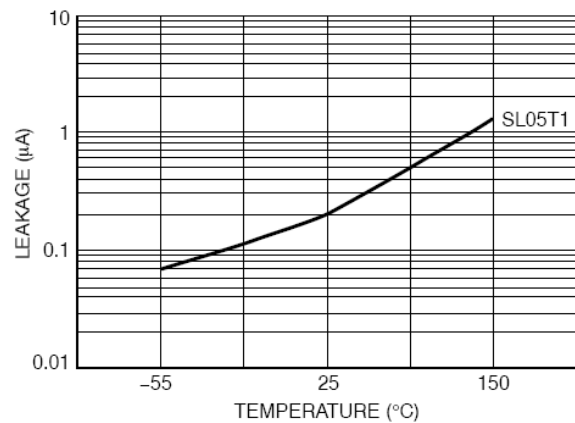


Figure 4. Typical Leakage Over Temperature

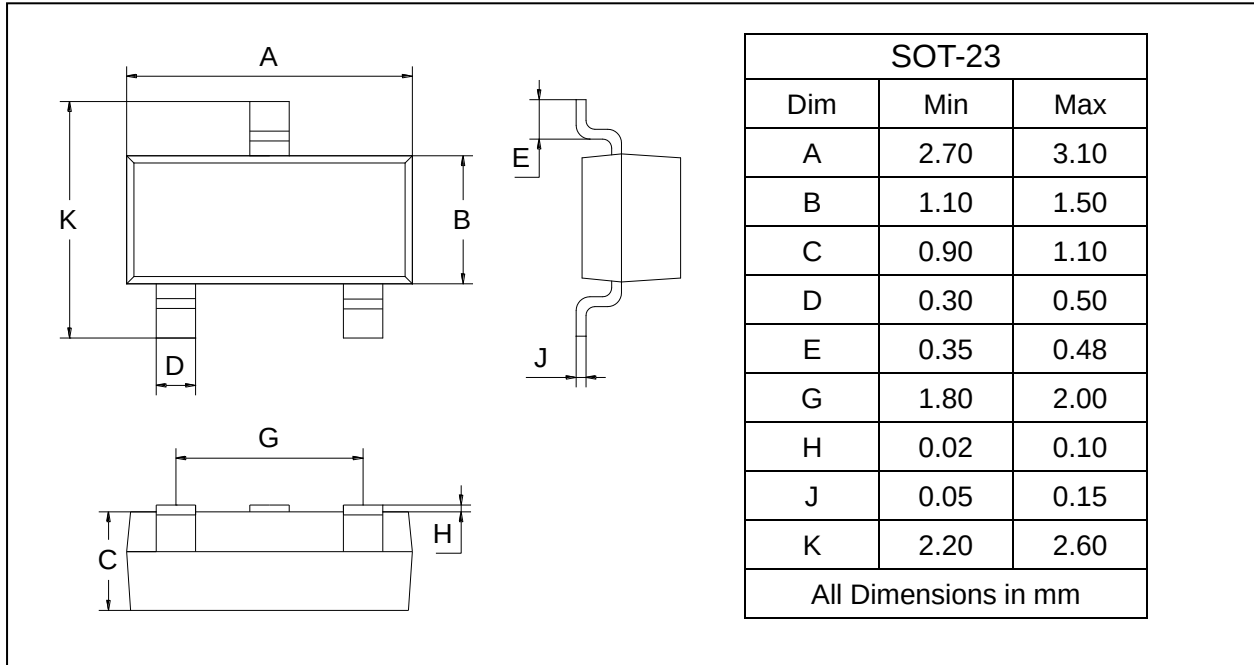
TVS DIODE ARRAY

TSL05-TSL24

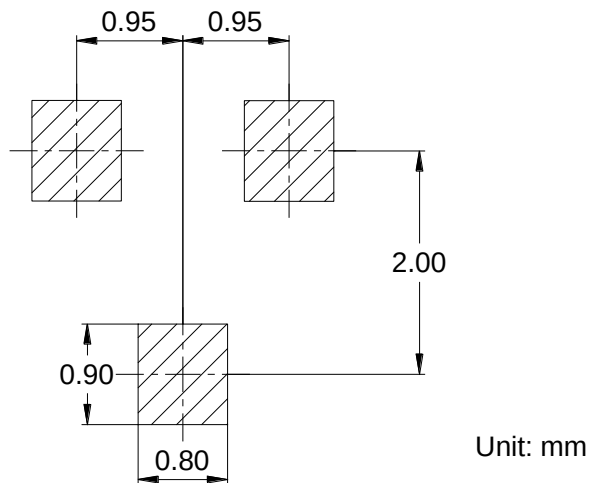
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
TSL05-TSL24	SOT-23	3000 pcs / Tape & Reel