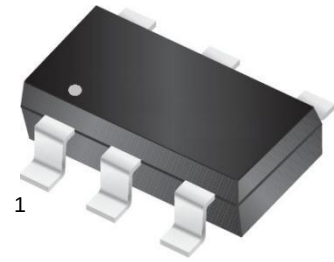


Features

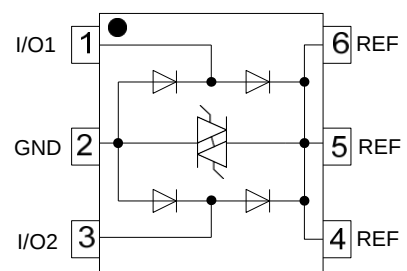
- Compatible with VDSL2, ADSL2 and with G.fast
- Low capacitance and leakage current
- Balanced overvoltage protection
- Low clamping voltage
- Response time under 500ns
- Low insertion loss
- Low distortion
- IEC61000-4-2 (ESD)±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT)30A(5/50ns)
- IEC 61000-4-5 (Lightning) 30A (8/20 μs)
- RoHS compliant
- Moisture Sensitivity Level 1

Applications

- xDSL modems and line cards
- G.Fast equipment



SOT23-6



Schematic Diagram

Absolute Maximum Ratings

(between pin1 and pin3, $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-repetitive impulse current on 8/20 μs waveform	I_{PP}	30	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	+/- 15	kV
ESD per IEC 61000-4-2 (Contact)		+/- 8	
Operating junction temperature range	T_J	-55 to +125	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics

(between pin1 and pin3, $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Stand-off voltage	V_{DRM}	$I_{DRM}=100\text{nA}$			24	V
Off-state current	I_{DRM}	$V_{DRM}=24\text{V}$			100	nA
Breakover Voltage	V_{BO}	$di/di=\pm 1\text{mA}/\mu\text{s}$		32		V
Breakover Current	I_{BO}	$di/di=\pm 1\text{mA}/\mu\text{s}$		60		mA
Holding current	I_H	$di/di=\pm 1\text{mA}/\mu\text{s}$		40		mA
Off-state capacitance	C_o	$F=1\text{MHz}$, 0V		1.1	2.0	pF
Delta Co	ΔC_o	Line bias=1V to V_{DRM}			0.5	pF

Typical Characteristic Curves

FIG.1:V- I curve characteristics
(Bi-directional)

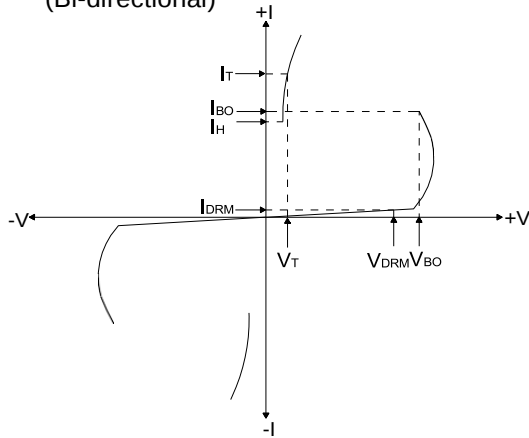
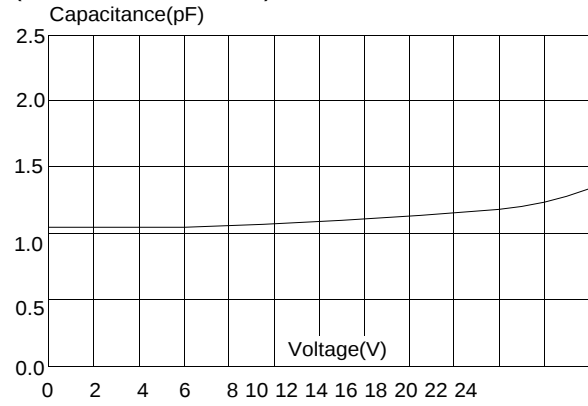
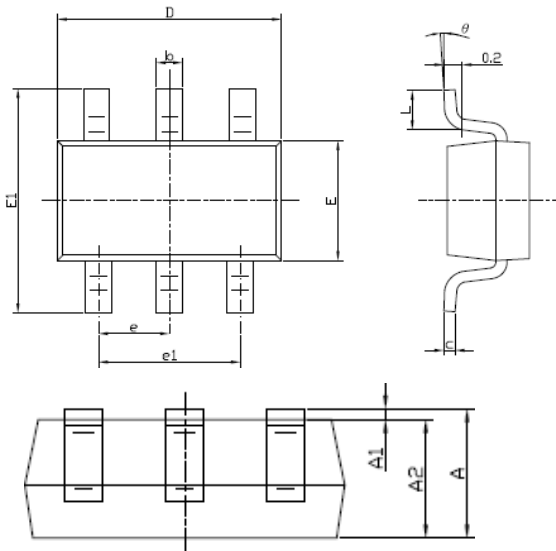


FIG.2: Typical capacitance against line voltage
(without external bias)

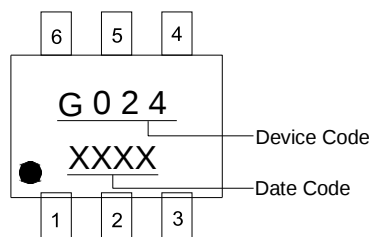


Product Dimensions



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	1.05	1.25	0.041	0.049
A1	0.00	0.10	0.000	0.004
A2	1.05	1.15	0.041	0.045
b	0.30	0.50	0.012	0.020
c	0.10	0.20	0.004	0.008
D	2.85	3.05	0.112	0.120
E	1.50	1.70	0.059	0.067
E1	2.65	2.95	0.104	0.116
e	0.95(BSC)		0.037(BSC)	
e1	1.80	2.00	0.071	0.079
L	0.30	0.60	0.012	0.024
θ	0°	8°	0°	8°
M	-	2.59	-	0.102
O	-	0.69	-	0.027
P	-	0.99	-	0.039
R	-	0.95	-	0.038

Marking



Order Information

Device	Package	Carrier	Quantity	HSF Status
SVG024G	SOT23-6	Tape & Reel (7")	3000pcs / Reel	RoHS Compliant