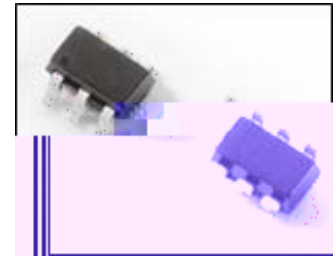




Integrated Thyristor Surge Protector

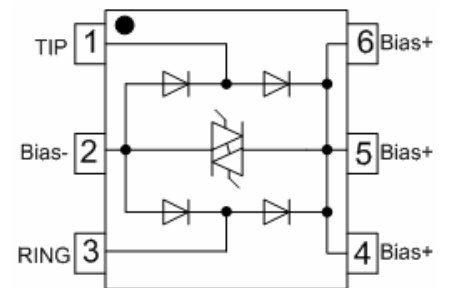


The integrated thyristor series provide overvoltage protection for applications such as VDSL2, ADSL2, and ADSL2+ with minimal effect on data signals. This silicon design innovation results in a capacitive loading characteristic that is compatible with these high bandwidth applications. The devices is also bi-directional between pin1 to pin3. All electrical parameters and surge ratings apply to forward and reverse polarities. This surface mount SOT23-6 package provides a surge capability that exceeds most worldwide standards and recommendations for lightning surge withstand capability of tertiary protectors.



SOT23-6

- C_μ Low insertion loss
- Low distortion
- Meets MSL level 3



Schematic & PIN Configuration

Marking code: W24GF

IEC61000-4-2 (ESD) ±15kV (a) (ont D)
 μ IEC61000-4-5 (Lightning) 35A (8/20μs)

JEDEC ‡

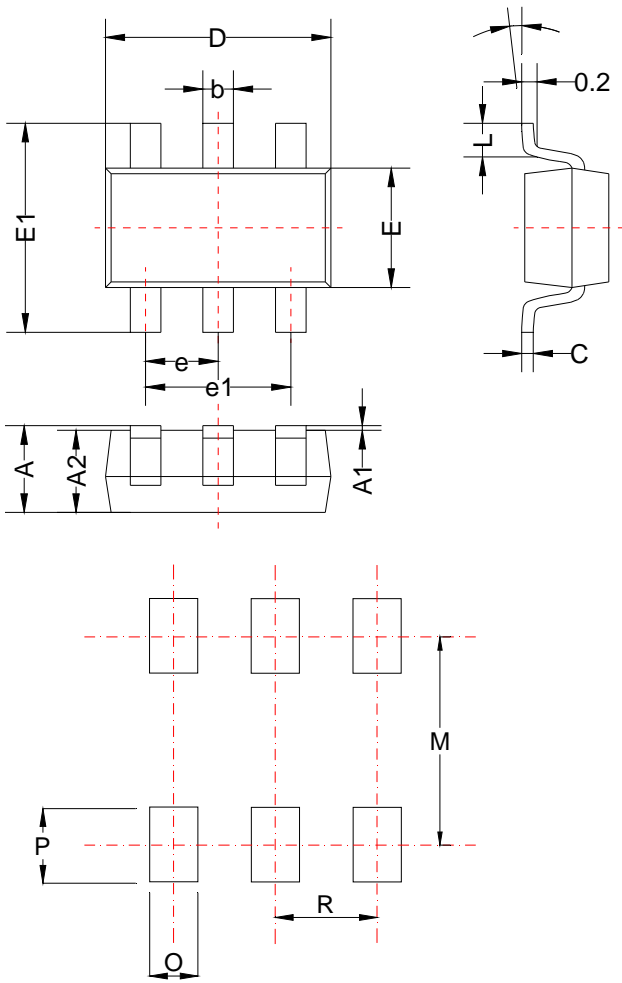


(between pin1 and pin3, $T_A=25$, RH=45%-75%, unless otherwise noted)

Non-repetitive impulse current at 8/20 μ s waveform	I_{PP}	35	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/- 15 +/- 8	kV
Lead soldering temperature	T_L	260 (10 sec.)	
Operating junction temperature range	T_J	-40 to +150	
Storage temperature range	T_{STG}	-65 to +150	

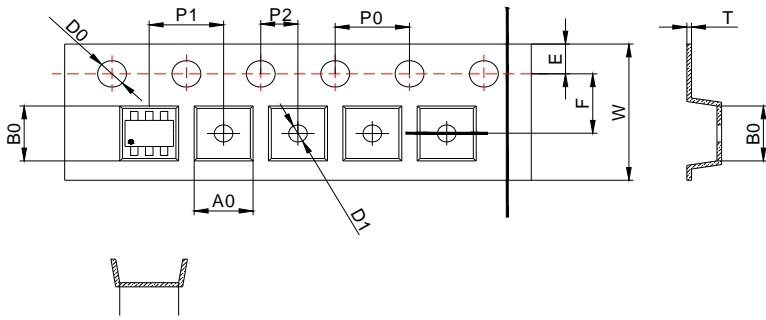
($T_A=25$)

Stand-off voltage	V_{DRM}	$I_{DRM}=1\mu A$	24		V
Off-state current	I_{DRM}	$V_{DRM}=24V$		1	μA
Switching voltage	V_S	100kV/s		30	V
Switching current	I_S		10		mA
Holding current	I_H			40	mA
On-state voltage	V_T	$I_T=1A$		3.5	



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
	0°	8°	0°	8°
M	-	2.59	-	0.102
O	-	0.69	-	0.027
P	-	0.99	-	0.039
R	-	0.95	-	0.038

Recommended solder pad layout





Part Number	Marking Code																
JIP5024G	<table border="0"><tr><td data-bbox="730 353 772 412">6</td><td data-bbox="831 353 873 412">5</td><td data-bbox="932 353 973 412">4</td><td></td></tr><tr><td colspan="3" data-bbox="708 421 999 479">W 24GF</td><td data-bbox="1027 465 1193 497">Device Code</td></tr><tr><td data-bbox="730 488 772 546">●</td><td colspan="2" data-bbox="799 488 911 546">XXXX</td><td data-bbox="1027 519 1174 551">Lot number</td></tr><tr><td data-bbox="730 555 772 613">1</td><td data-bbox="831 555 873 613">2</td><td data-bbox="932 555 973 613">3</td><td></td></tr></table>	6	5	4		W 24GF			Device Code	●	XXXX		Lot number	1	2	3	
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