















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

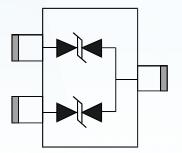
Domestic Part Number	ESDCAN24-2BLY
Overseas Part Number	ESDCAN24-2BLY
▶ Equivalent Part Number	ESDCAN24-2BLY





#### **Features**

- 280W peak pulse power (tp =8/20µs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 6A(8/20µs)



## **Applications**

- Dataline
- Automatic Teller Machines
- Net works
- Power line

#### **Mechanical Data**

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

#### **Absolute Maximum Rating**

Rating	Symbol	Value	Units	
Peak Pulse Power ( tp =8/20µs )	P <sub>PP</sub>	280	W	
Peak Pulse Current ( tp=8/20μs ) (note1)	I <sub>pp</sub>	6	А	
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V <sub>ESD</sub>	30 30	kV	
Lead Soldering Temperature	TL	260/10S	°C	
Junction Temperature	TJ	-55 to + 125	°C	
Storage Temperature	T <sub>stg</sub>	-55 to + 125	°C	

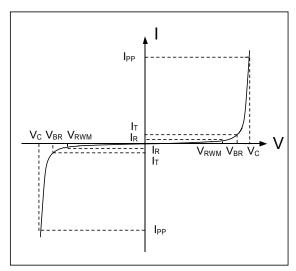


#### **Electrical Characteristics**

Parameter	Symbol	Conditions Mi		Typical	Max	Units
Reverse Stand-Off Voltage	<b>V</b> RWM				24.0	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	26.7	30.0	34.0	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =24V,T=25°C		0.1	0.5	μA
Peak Pulse Current	I <sub>PP</sub>	t <sub>p</sub> =8/20μs			6	А
Clamping Voltage	Vc	I <sub>PP</sub> =6A,t <sub>p</sub> =8/20μs		48	55	V
Junction Capacitance	C <sub>j</sub>	$V_R = 0V, f = 1MHz$		12	15	pF

## Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter	
<b>I</b> PP	Maximum Reverse Peak Pulse Current	
Vc	Clamping Voltage @ IPP	
VRWM	Working Peak Reverse Voltage	
<b>I</b> R	Maximum Reverse Leakage Current @ VRWM	
V <sub>BR</sub>	Breakdown Voltage @ Ιτ	
lτ	Test Current	



 $Note:.\,8/20\mu spulse wave form.$ 



#### **TypicalCharacteristics**

Figure 1: Peak Pulse Power vs. Pulse Time

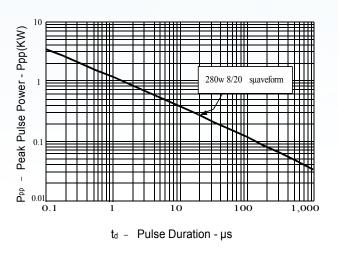


Figure 2: Power Derating Curve

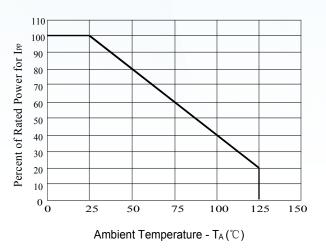


Figure3: Pulse Waveform

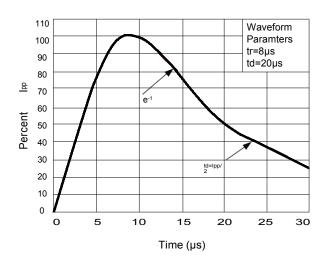
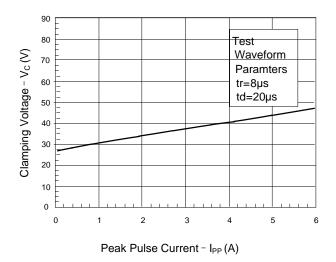
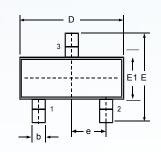


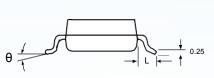
Figure 4: Clamping Voltage vs.lpp





### **Outline Drawing - SOT-23**

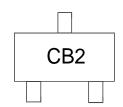






	DIMENSIONS				
SYMBOL	MILLIMETER		INCHES		
01111101	MIN	MAX	MIN	MAX	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
D	2.800	3.000	0.110	0.118	
b	0.300	0.500	0.012	0.020	
E	2.250	2.550	0.089	0.100	
E1	1.200	1.400	0.047	0.055	
е	0.950 BSC		0.037 BSC		
L	0.500	0.675	0.020	0.027	
θ	0	8°	0	8°	

### Marking



# **Ordering information**

Order code	Package	Baseqty	Deliverymode
ESDCAN24-2BLY	SOT-23	3000	Tape and reel



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