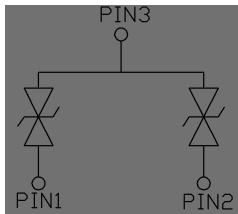




CAN-FD bus ESD protection diode



SOT-23



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Dual Line CAN-FD Bus Protector for SOT-23 Package
- Max Peak Pulse Power 180W per Line (tp=8/20 μs)
- IEC 61000-4-2, level 4 (ESD)
- IEC 61000-4-5 (surge), I_{PP} = 5A at tp = 8/20 μs
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- Automotive Controlled Area Network

Mechanical Data

- **Case:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25

HBM Note2	V _{ESD}	kV	30
IEC 61000-4-2 (contact discharge) Note2		kV	30

Note1 Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC 61000-4-5.

Note2 Measured from pin 1 to 3 or 2 to 3.

■ Electrical Characteristics (T_a=25 unless otherwise noted)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN.	TYP.	MAX.
Reverse Working Voltage	V _{RWM}	V		-	-	24
Reverse Breakdown Voltage	V _{BR}	V	I _r =1mA	25.5		35.5
Reverse Leakage Current	I _R	nA	V _{RWM} =24V	-	1	50

Clamping Voltage(pin 1 to 3 or 2 to 3)) c

	j	pF	V _R =0V, f=1MHZ	-	6	10
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Notes:

(1). Non-repetitive current pulse, according to IEC61000-4-5.

(2). TLP parameter: Z₀ = 50Ω, tp = 100ns, tr = 2ns, averaging window from 60ns to 80ns. RDYN is calculated from 4A to 16A.



■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD2CANFD24T2Q	F2	Approximate 0.01	3000	30000	120000	7" reel

y Characteristics (Typical)

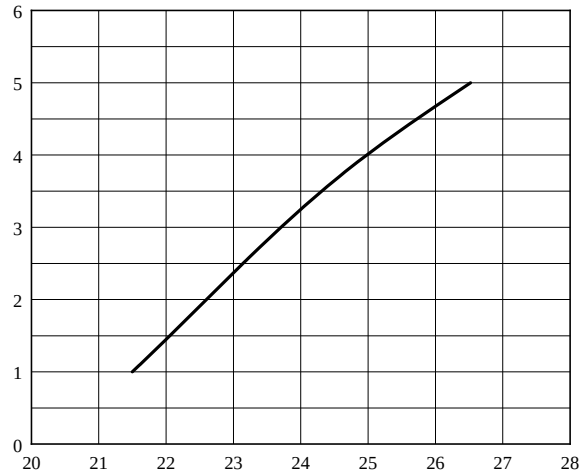
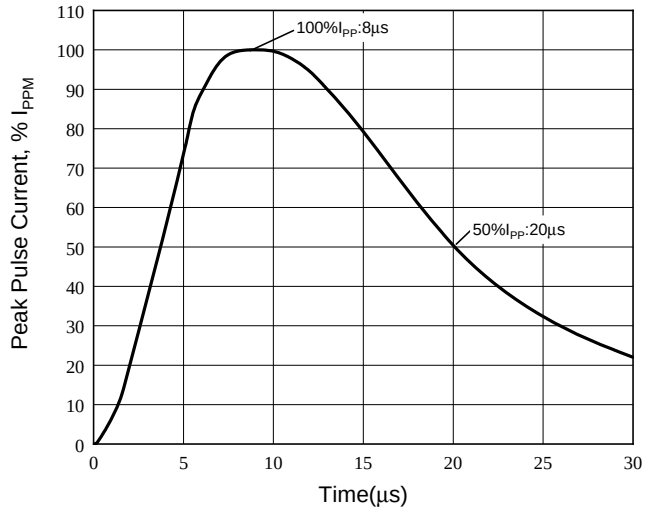
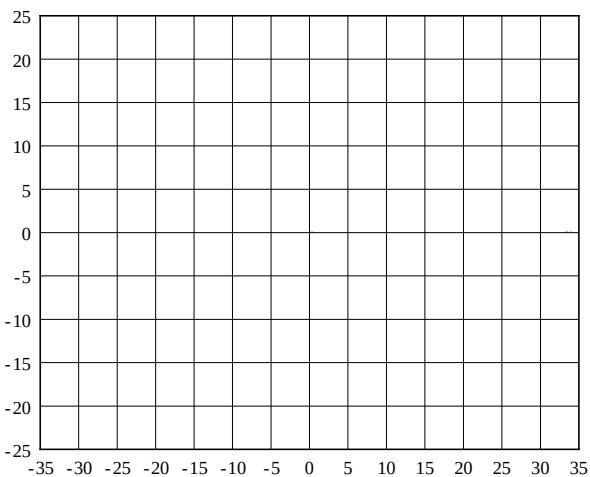
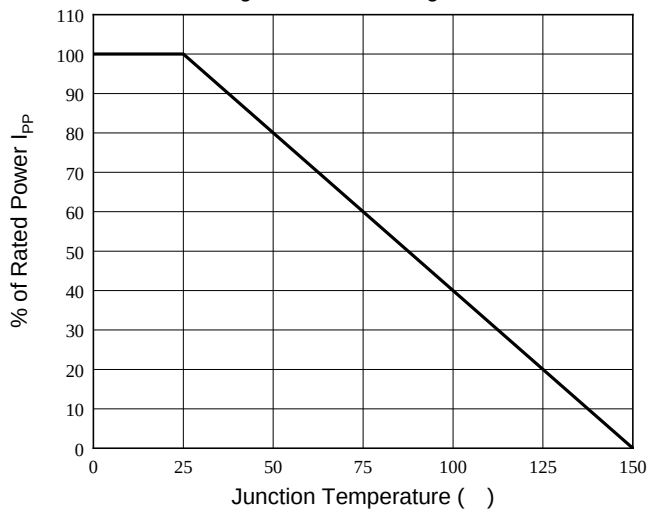
Fig.1: 8/20 μ s Pulse Waveform

Fig.3: Power Derating Curve



y Outline Dimensions

DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050

UNIT: mm

NOTES:
 1. DIMENSIONS ARE IN MILLIMETERS.
 2. DIMENSIONS ARE IN INCHES.
 3. DIMENSIONS ARE IN MILLIMETERS.
 4. DIMENSIONS ARE IN INCHES.



- Note:



Disclaimer

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