



2- Line, Uni-directional, ESD protection diode

Features

- Transient protection for each line according to IEC61000-4-2(ESD):
 - IEC61000-4-5:3.5
- Low leakage current
- Ultra low clamping voltage
- RoHS Compliant
- Part no. with suffix "Q" means AEC-Q101 qualified

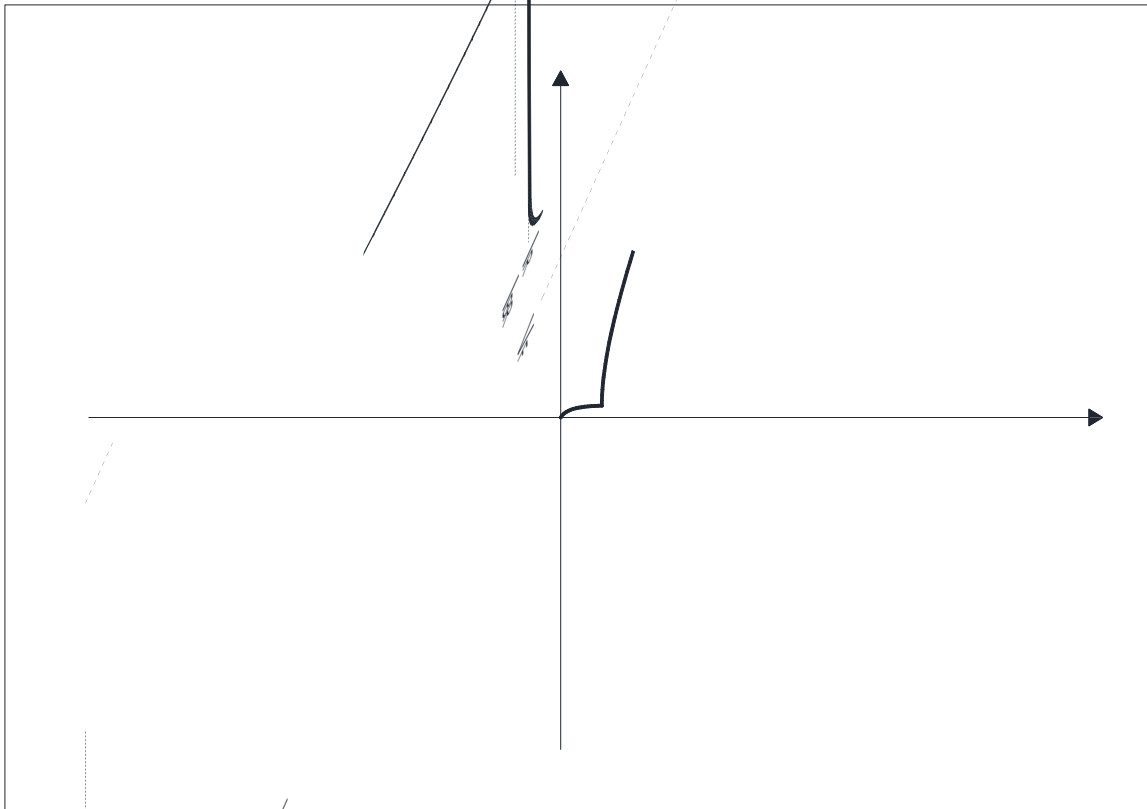
Applications

- Vehicle domain controller ,VCU electrostatic protection
- Electrostatic protection for automotive electronic multimedia interface
- CAN Bus protection
- Automotive applications

Mechanical Data

- Package: SOT-23
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Moisture Sensitivity: Level 1 per J-STD-020

Definitions of electrical characteristics





ESD2702ETSQ

Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	245	W
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 16	KV
ESD according to IEC61000-4-2 contact discharge		± 16	
Junction temperature	T_J	-55~150	
Storage temperature	T_{STG}	-55~150	

Notes:

CAUTION: Stresses above those listed in "Absolute Maximum Ratings" may cause permanent damage to the component. This is a stress only rating and operation of the component at these or any other conditions above those indicated in the operational sections of this specification is not implied.

Electrical Characteristics $T_J=25$

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Standoff Voltage	V_{RWM}	V				27
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	31		38
Reverse leakage current	I_R	μA	$V_{RWM} = 27V$			0.5
Forward Voltage	V_F	V	$I_F=10mA$			1.1
Clamping voltage ¹⁾	V_C	V	$I_{PP} = 1A, t_p = 8/20\mu s$			50
		V	$I_{PP} = 3.5A, t_p = 8/20\mu s$			70
	I_{PP}	A	$t_p = 8/20\mu s$			3.5
Junction capacitance	C_J	pF	$V_R = 0V, f = 1MHz$		16	25

Notes:

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

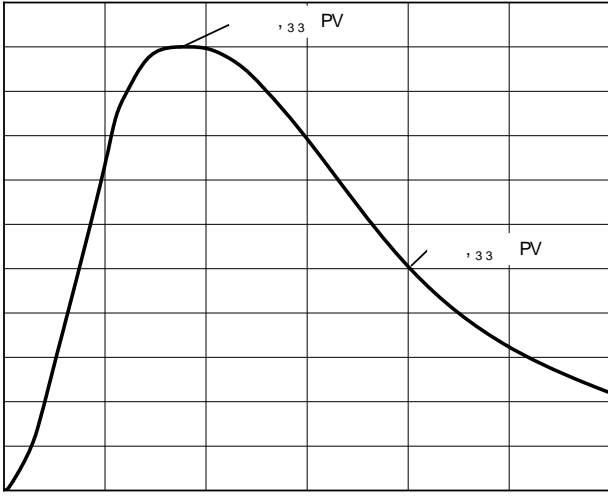
Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD2702ETSQ	F2	Approximate 10	3000	30000	120000	7 reel

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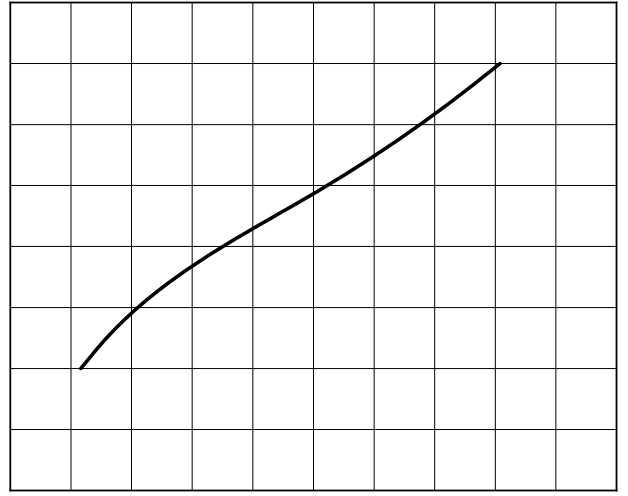
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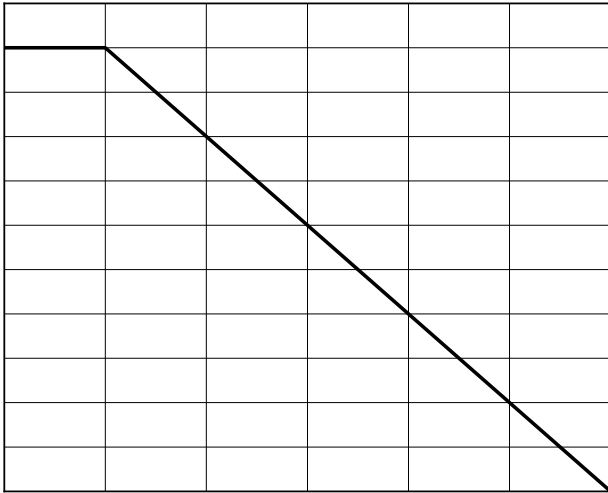


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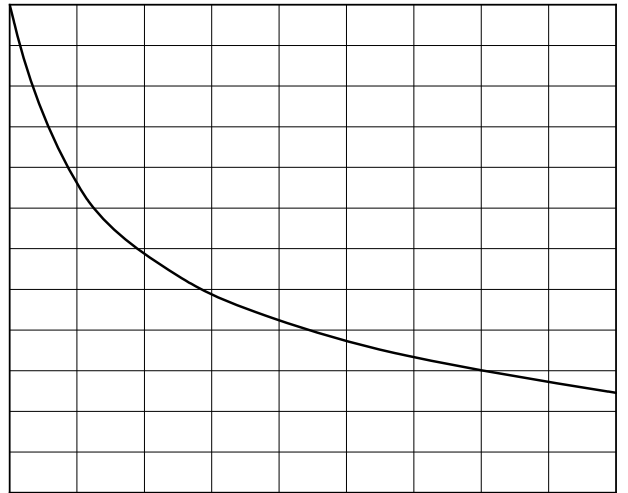
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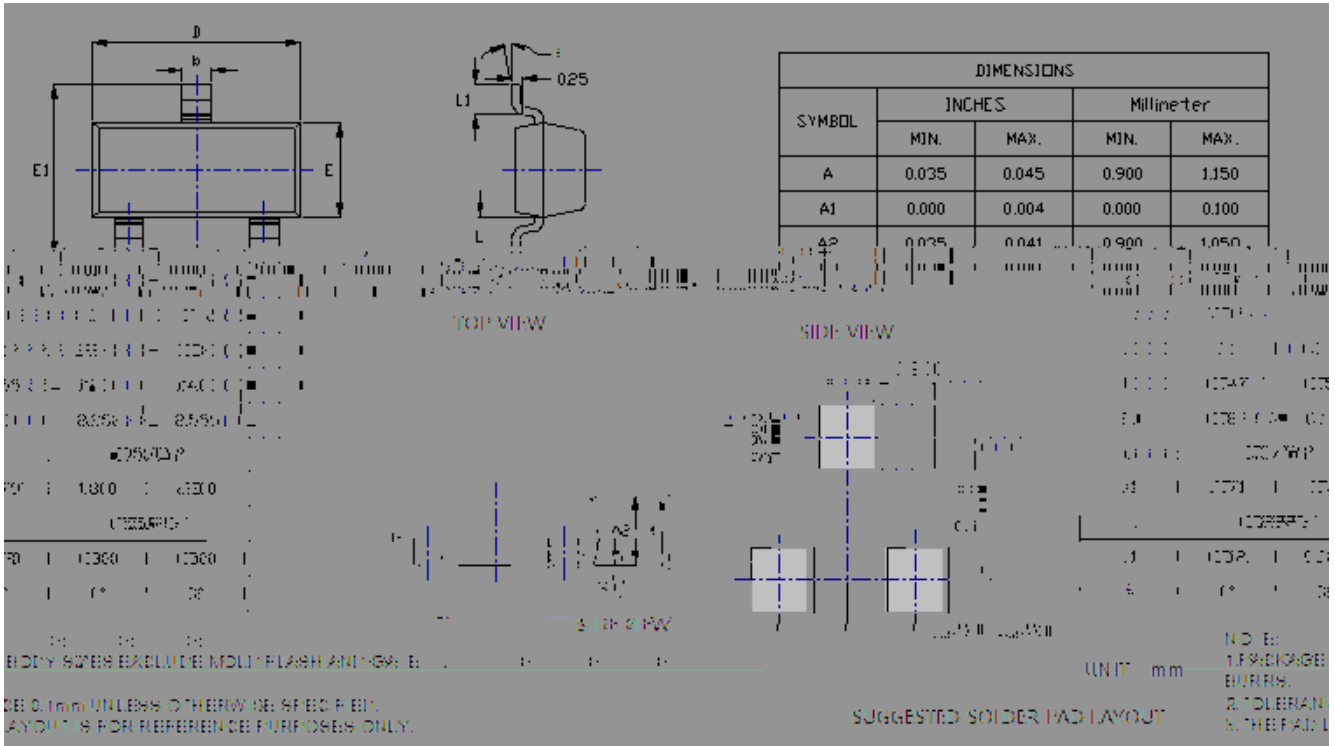
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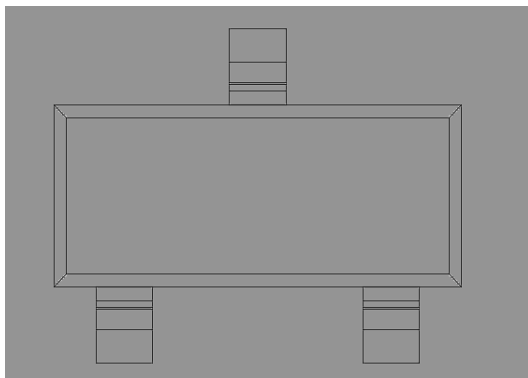


ESD2702ETSQ

Outline Dimensions



Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black



Disclaimer

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