

## 2- Line, Uni-directional, ESD protection diode

### Features

Transient protection for each line according to  
IEC61000-4-2(ESD):  $\pm 16\text{kV}$  contact,  $\pm 16\text{kV}$  air  
IEC61000-4-5:  $3.5\text{A}$  ( $t_p=8/20\mu\text{s}$ )  
Low leakage current  
Ultra low clamping voltage  
RoHS Compliant  
Part no. with suffix "Q" means AEC-Q101 qualified

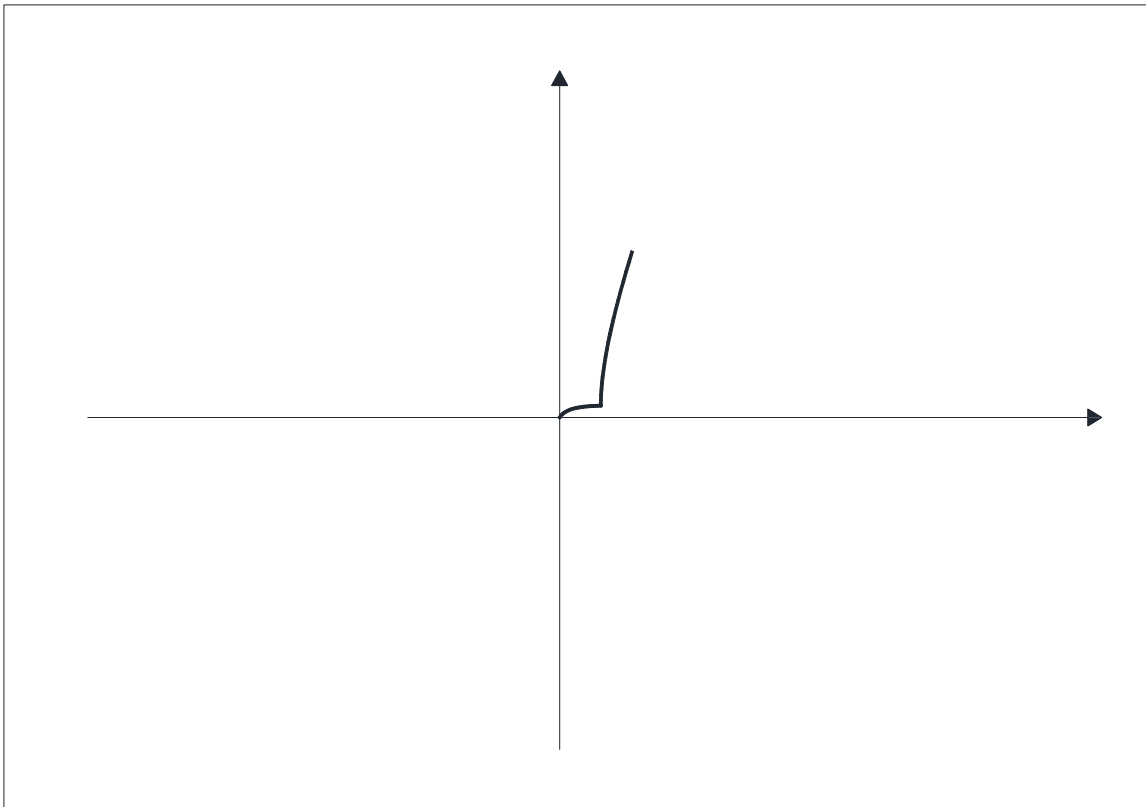
### Applications

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	$V_{ESD}$	$\pm 16$	KV
ESD according to IEC61000-4-2 contact discharge		$\pm 16$	
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	$I_R$	$\mu A$	$V_{RWM} = 27V$			0.5
Forward Voltage	$V_F$	V	$I_F=10mA$			1.1
Clamping voltage <sup>1)</sup>	$V_C$	V	$I_{PP} = 1A, t_p = 8/20\mu s$			50
		V	$I_{PP} = 3.5A, t_p = 8/20\mu s$			70
Peak Pulse Current	$I_{PP}$	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.

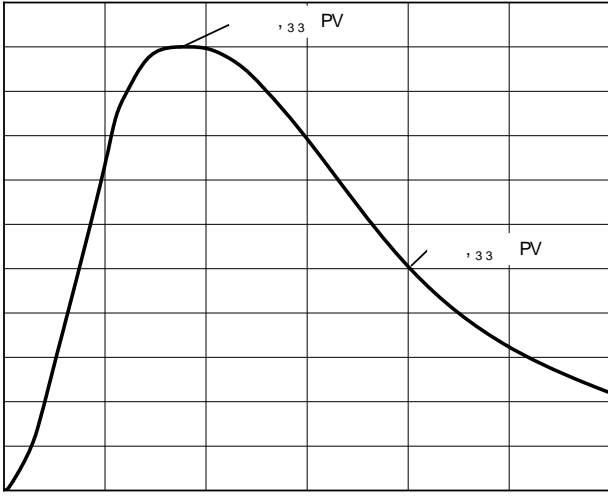
## Ordering Information (Example)

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 r

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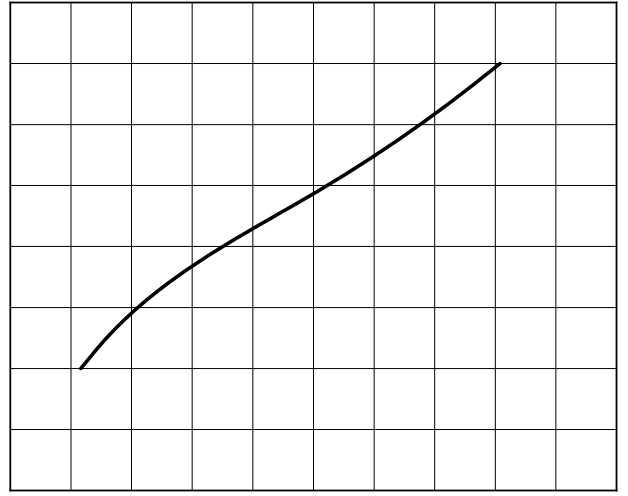
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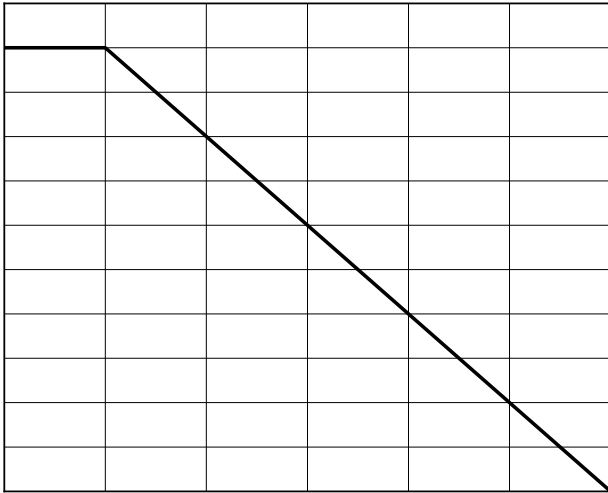


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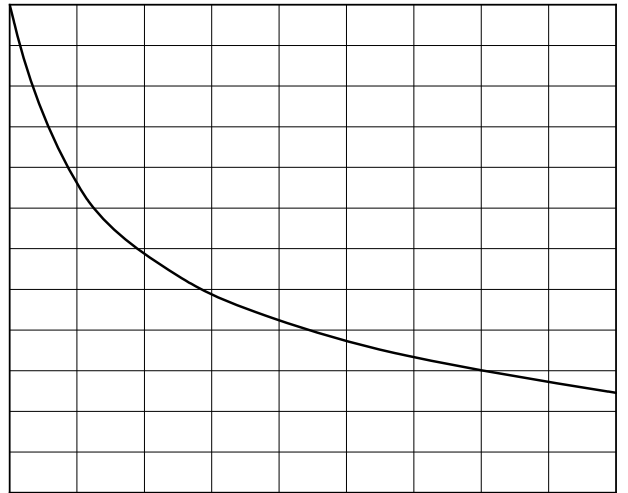
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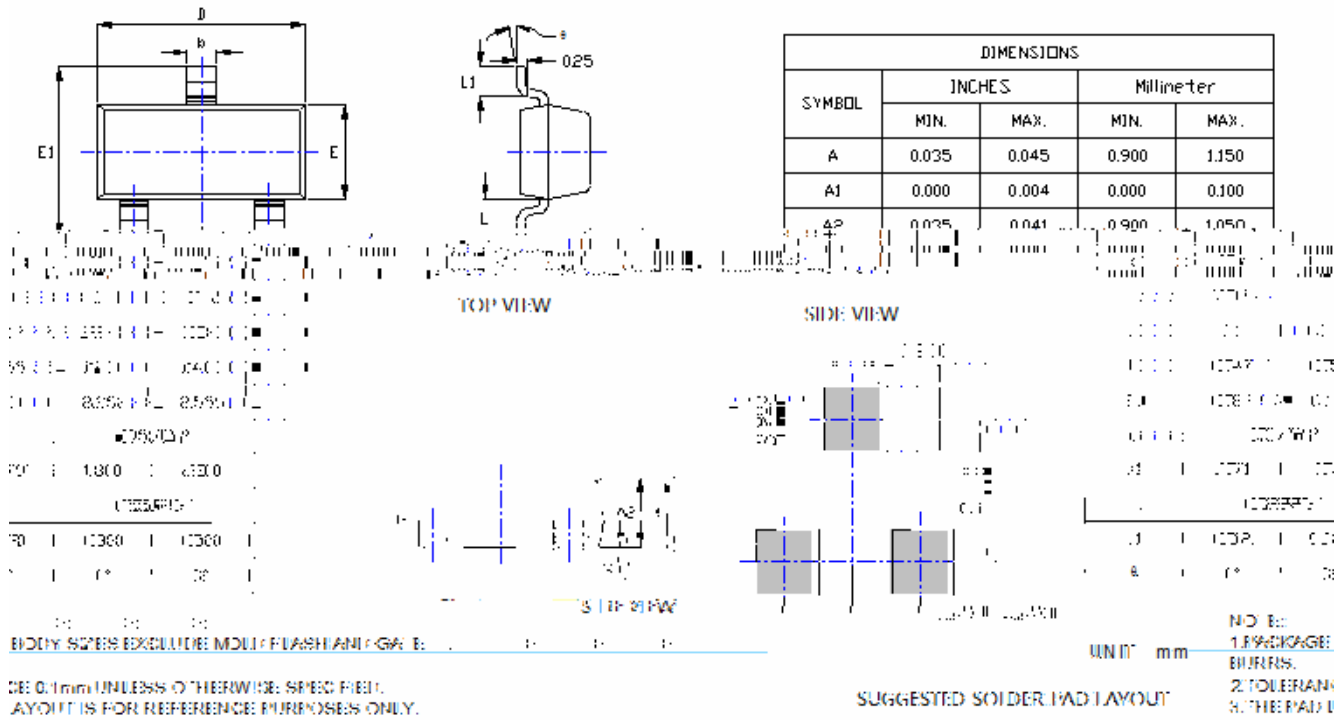
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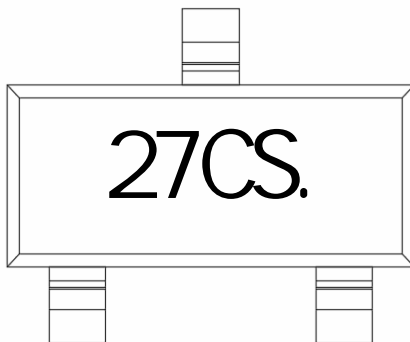


# ESD2702ETSQ

## 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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