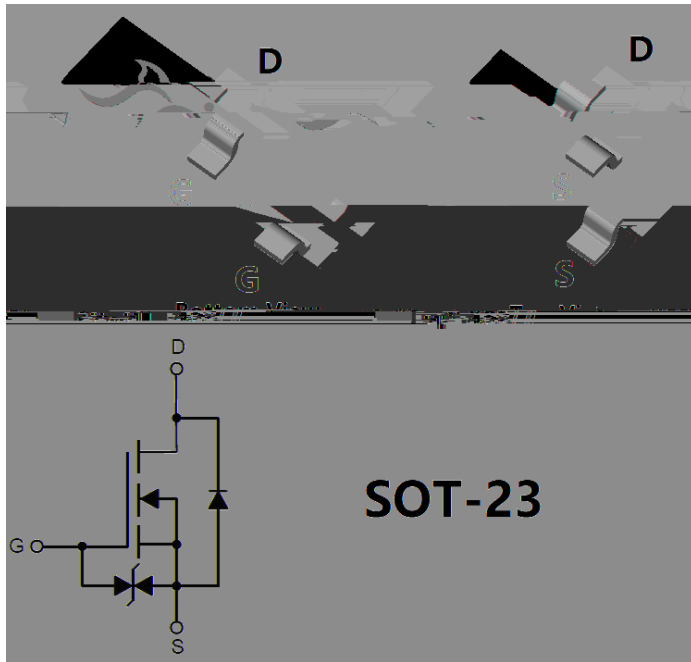




SOT-23

2.5ohm
 $r_{DS(ON)}$ (at $V_{GS}=4.5V$) 3.0ohm
 Gate-Source ESD Rating Up to 2KV (HBM)

Trench Power MV MOSFET technology
 Voltage controlled small signal switch
 Low input Capacitance
 Fast Switching Speed
 Low Input / Output Leakage
 Part no. with suffix "Q" means AEC-Q101 qualified

Battery operated systems
 Solid-state relays
 Direct logic-level interface TTL/CMOS

$T_A=25$ unless otherwise noted

Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	≈ 20	V
Drain Current	$T_A=25$ @ Steady State	I_D	300	mA
	$T_A=70$ @ Steady State		240	
Pulsed Drain Current ^A		I_{DM}	1.5	A
Total Power Dissipation @ $T_A=25$		P_D	300	mW
Thermal Resistance Junction-to-Ambient @ Steady State ^B		R_{dJA}	416	/ W

Junction and Storage Temperature Range T_J, T_{STG} -55 +150 OUTER CARTON

					QUANTITY(pcs)	DELIVERY MODE
2N7002KCQ	F2	72KC.	3000	30000	120000	7" reel



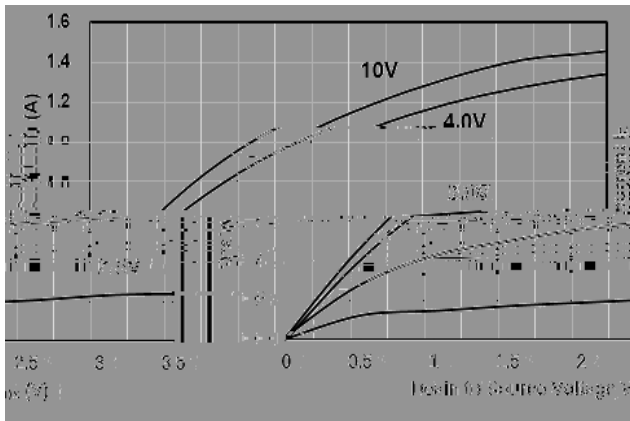


Figure1. Output Characteristics

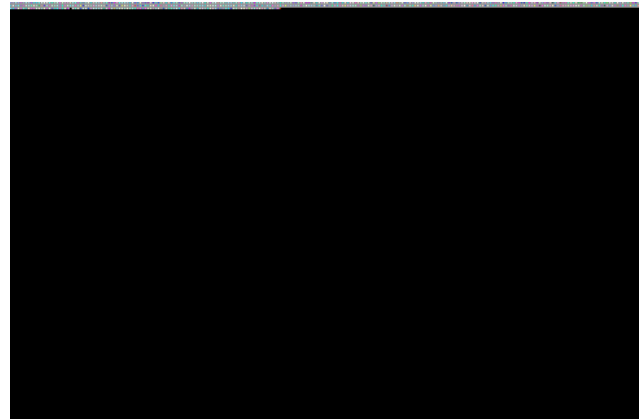


Figure2. Transfer Characteristics

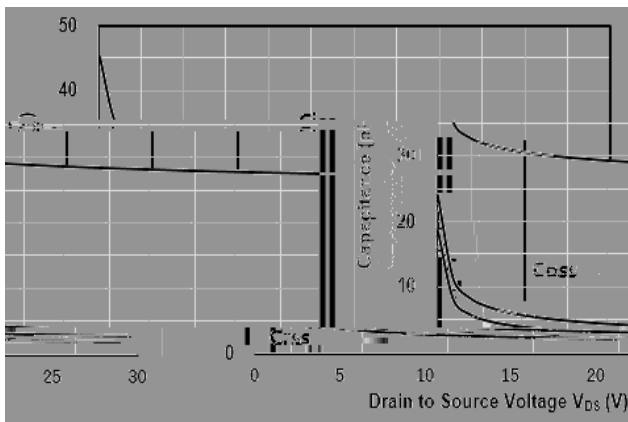


Figure3. Capacitance Characteristics

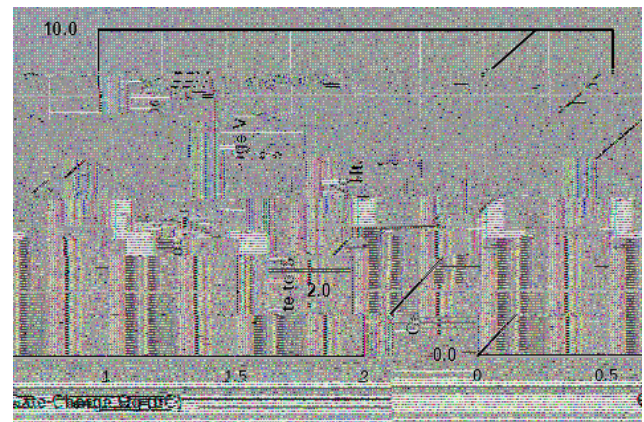


Figure4. Gate Charge

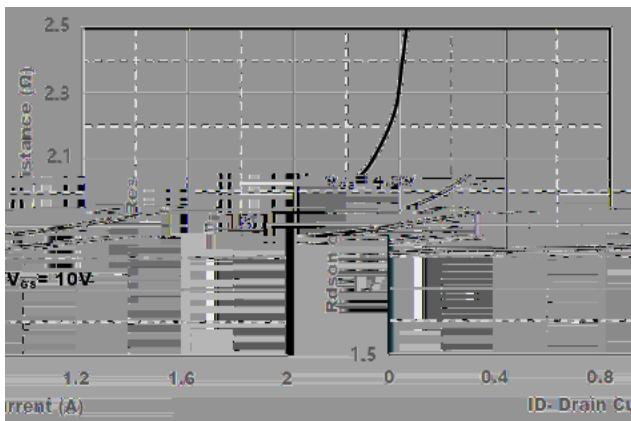


Figure5. Drain-Source on Resistance

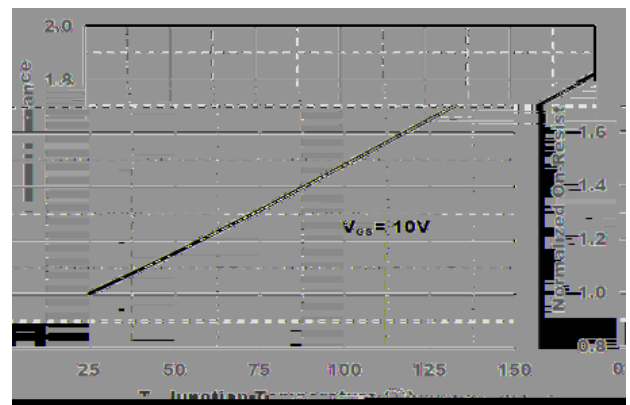


Figure6. Drain-Source on Resistance

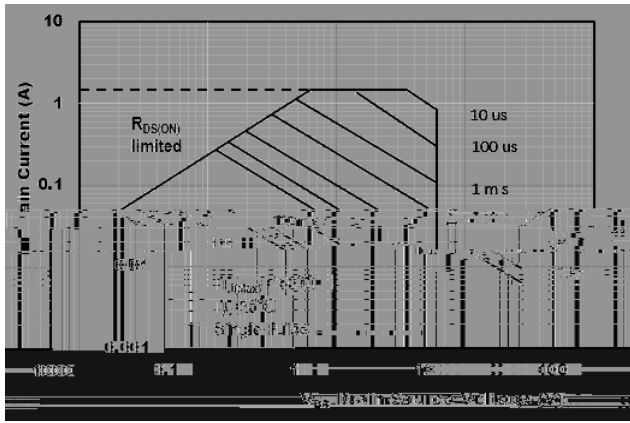


Figure7. Safe Operation Area

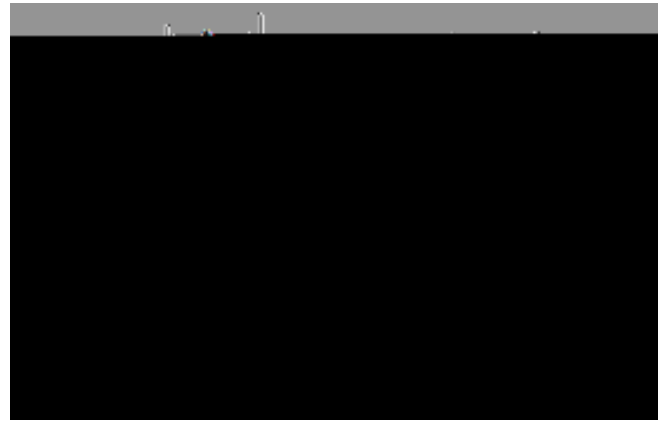
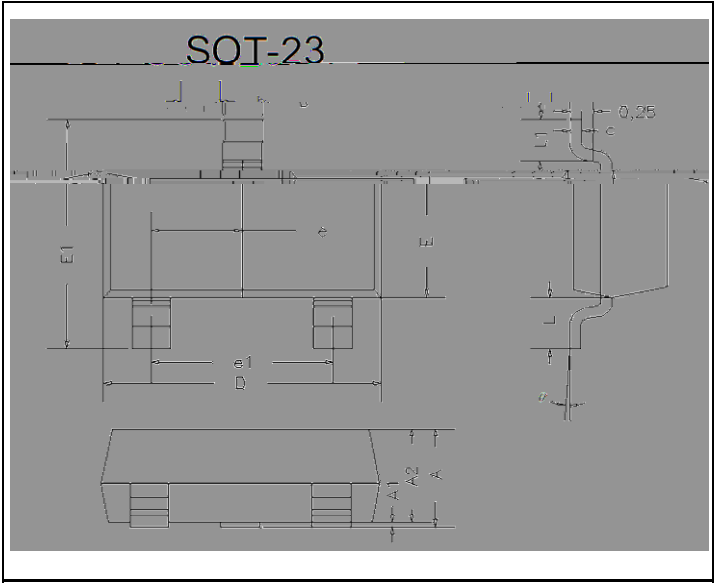


Figure8. Switching wave

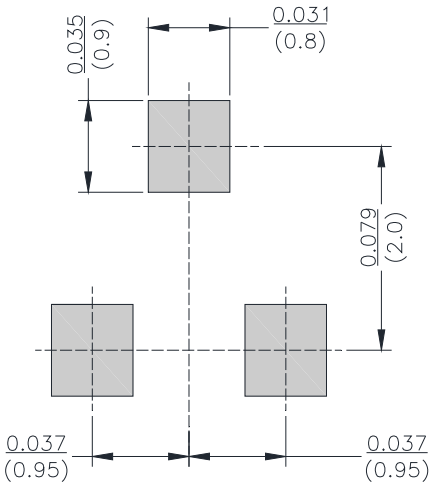


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DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.045	0.90	1.15	
A1	0.000	0.004	0.00	0.10	
A2	0.035	0.041	0.90	1.05	
b	0.012	0.020	0.30	0.50	
c	0.004	0.008	0.10	0.20	
D	0.110	0.118	2.80	3.00	
E	0.047	0.055	1.20	1.40	
E1	0.089	0.100	2.25	2.55	
e	0.370TYP		0.95TYP		
e1	0.071	0.079	1.80	2.00	
L	0.220REF		0.55REF		
L1	0.012	0.020	0.30	0.50	
d	0Å	8Å	0Å	8Å	

y





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