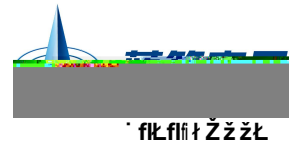


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A	2022.4.21	ALL	AOS-AOD 950A 70		
B	2022.5.26	2,3,4,5	YC-RMX65R1KOSN_ReV1.2		



TO-252 N 650V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-252 Plastic Package.

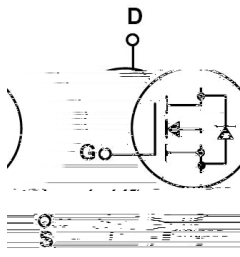
Low R_{DS(on)}, low gate charge, low C_{rss}, fast switching, HF Product.

Low R_{DS(on)}, low gate charge, low C_{rss}, fast switching, HF Product.

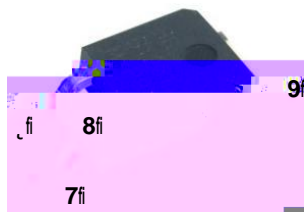
DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

TO-252 N 650V



TO-252 N 650V



PIN 1 G PIN 2 D PIN 3 S PIN 4 D

TO-252 N 650V

See Marking Instructions.

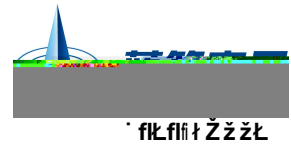
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Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	$I_D(T_C=25^\circ C)$	5	A
Drain Current - Pulsed	I_{DM}	20	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	27	mJ
Avalanche Current	I_{AS}	2.5	A
Power Dissipation	$P_D(T_C=25^\circ C)$	56.5	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ C$
Junction-to-Case	R_{JC}	2.2	$^\circ C/W$
Junction-to-Ambient	R_{JA}	55	$^\circ C/W$

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Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	650	700		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=650V$ $V_{GS}=0V$ $T_J=25^\circ C$			1.0	μA
Gate-Body Leakage Current, Forward	I_{GSS}	$V_{GS}=\pm 30V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$					



Electrical Characteristics (Typical Values)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Diode Forward Current	I_S				5	A
Total Gate Charge	Q_g	$V_{DS}=520V \quad I_D=2A$ $V_{GS}=10V$		9.1		nC
Gate-Source Charge	Q_{gs}			2.1		nC
Gate-Drain Charge	Q_{gd}			4.0		nC
Reverse recovery time	T_{rr}	$V_R=50V, I_F=2A,$ $di_F/dt=100A/\mu s$		159		ns
Reverse recovery charge	Q_{rr}			0.93		uC

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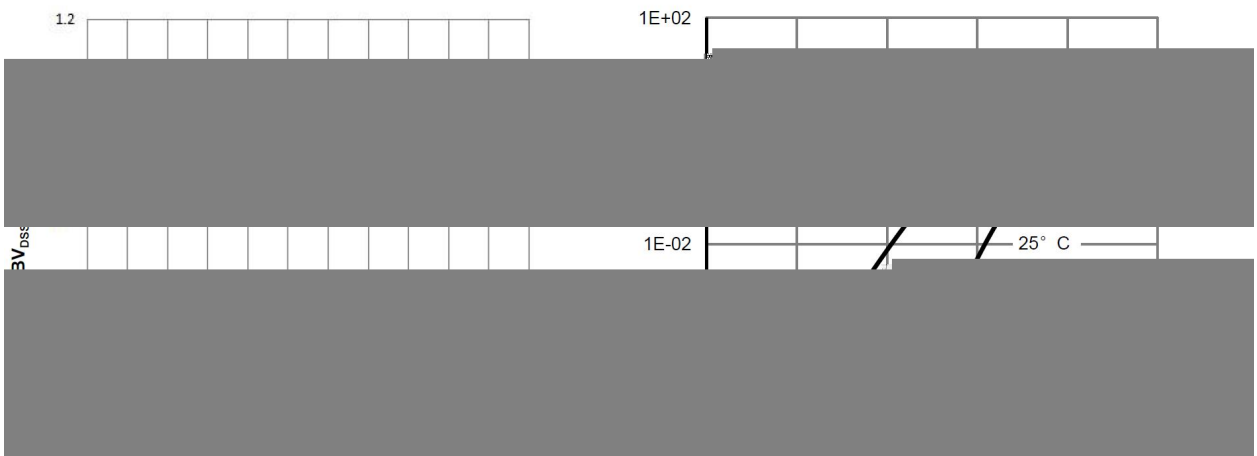
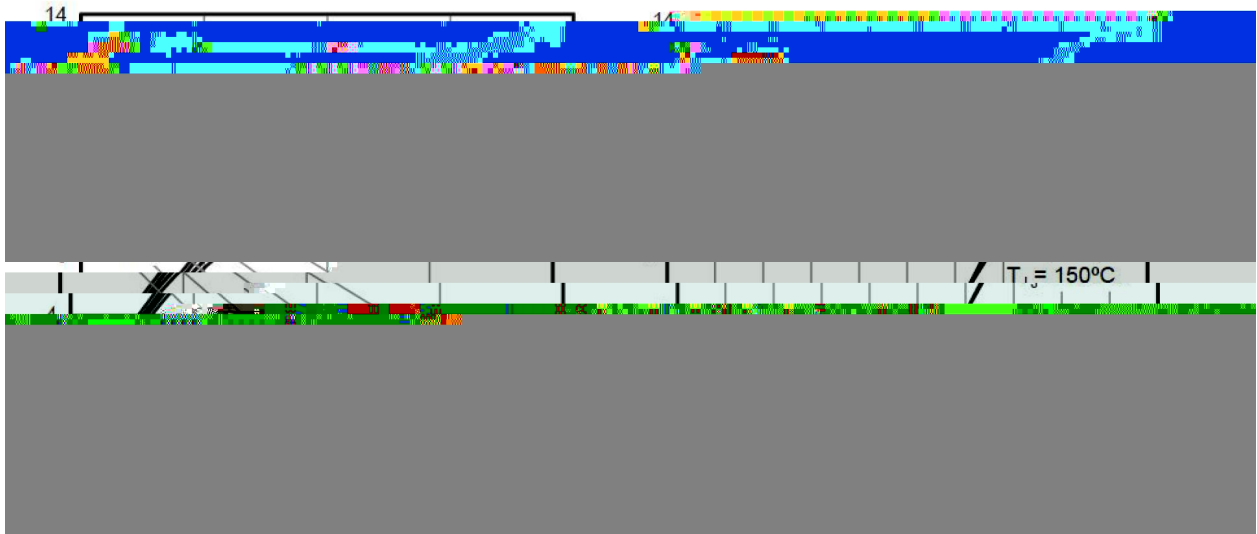
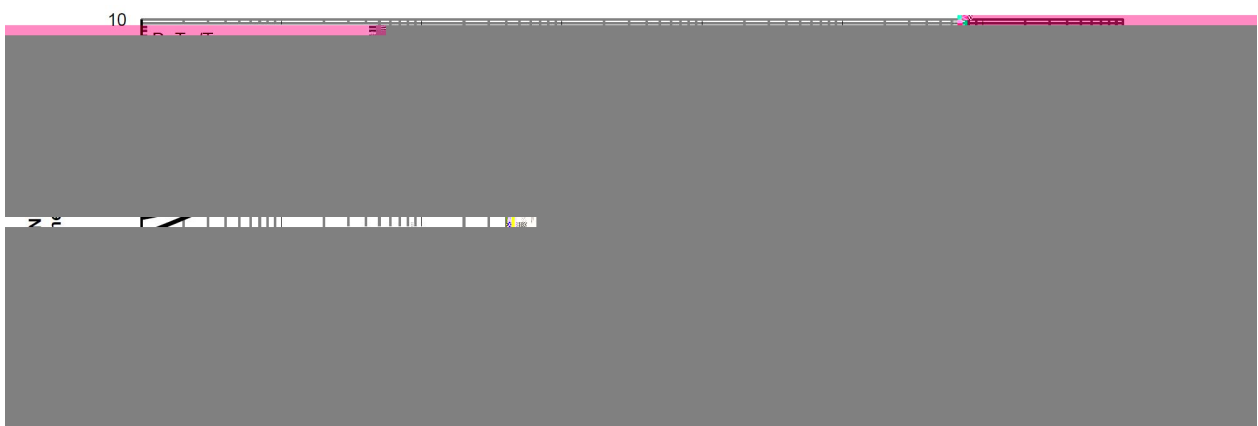
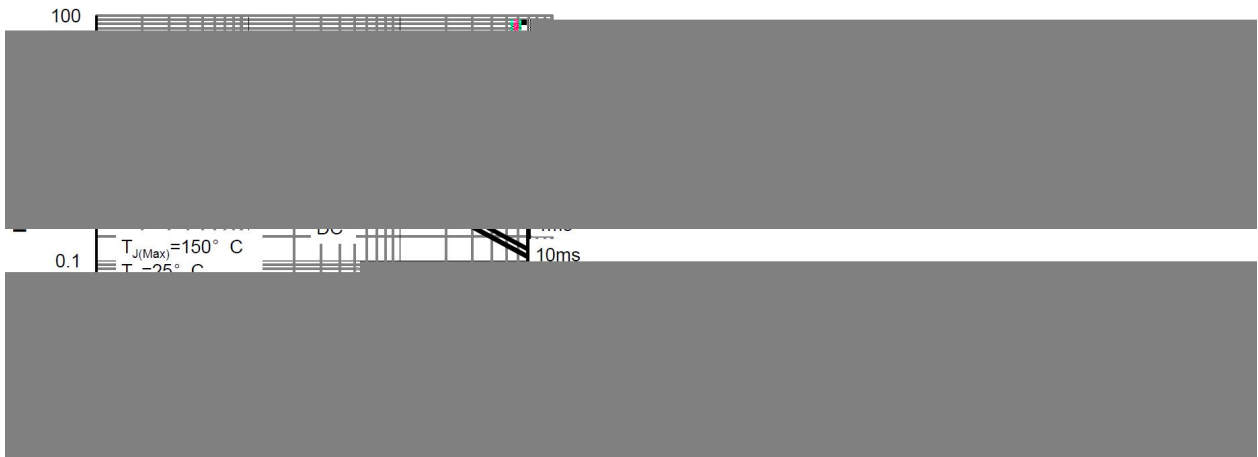
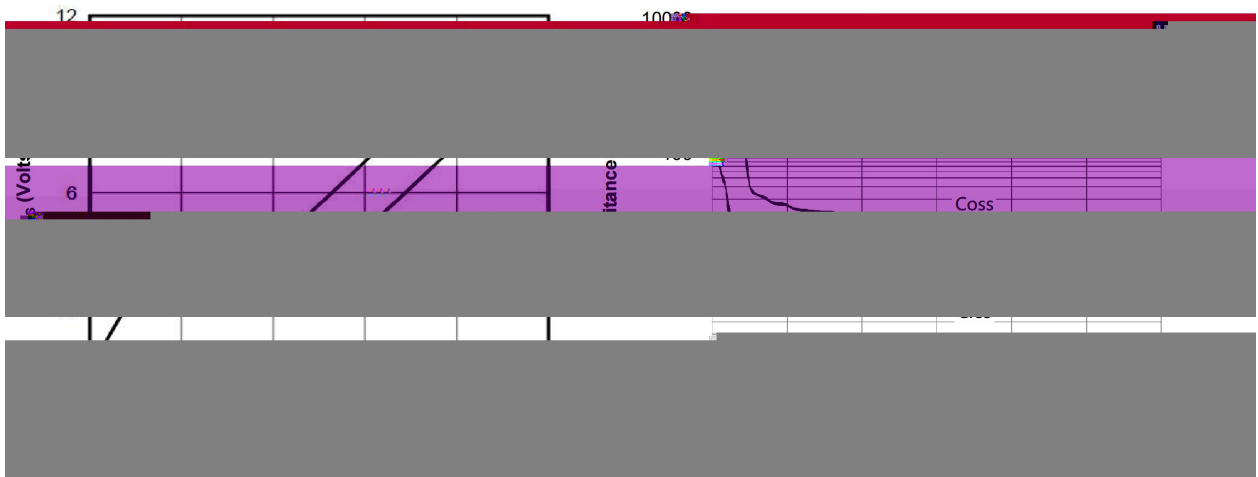
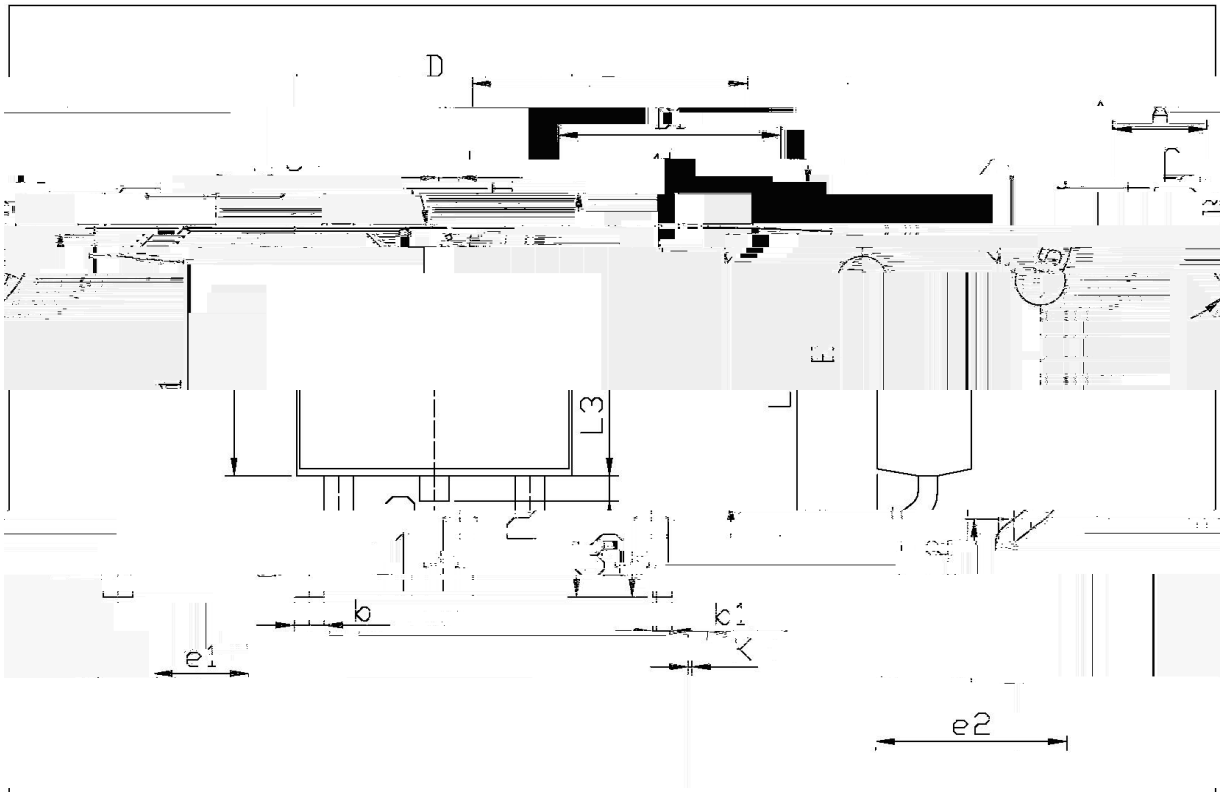


Figure 4: (a) V_{DS} (V) vs. t (ms) at $I_{D,avg} = 3.0$ A

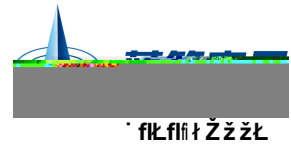


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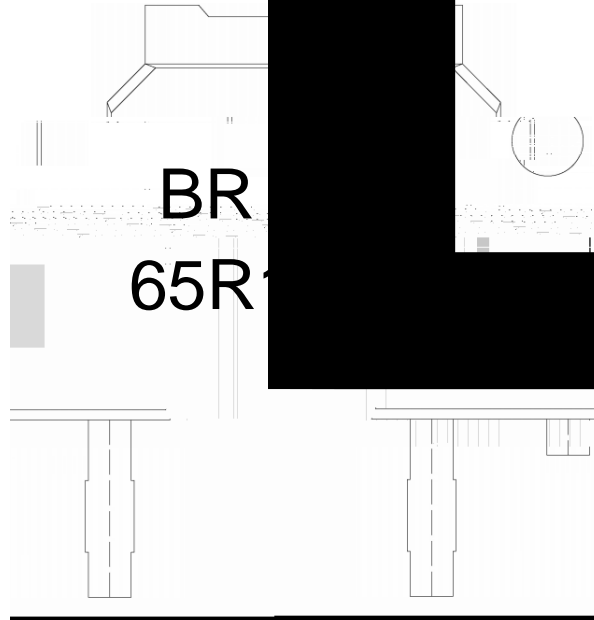


1/2: mm

Min.	Max.	Min.	Max.	Symbol
1.25	eF	2.24	2.34	B
0.45	0.55	9.85	10.35	
0.60	0.90	6.45	6	



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BR

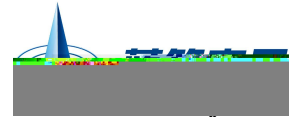
65R1K0C

Note:

BR: Company Code

65R1K0C: Product Type Code

****: Lot No. Code, code change with Lot No



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= ?fi fi !fi fi Temperature Profile for IR Reflow Soldering(Pb-Fr



- 1 150
- 2 245
- 3

fi fi !fi

260±5°C 10±1 sec.

fi fi !fi 6, /fi fi

/ RE

Package Type	
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