

/ Revised record

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A	2021.12.22	ALL	0 1 AOS-AON6242(2 3 4 5)+ 2 3 PD+RJ) 6 7 8 - ! 9 : ; < = > ? 2 3 N020 @ : ;	A B 0	C D E
6DM					

/ Descriptions

TO-263 N

N-CHANNEL MOSFET in a TO-263 Plastic Package.

/ Features

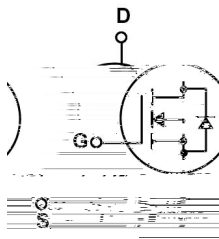
Ultra Low On-Resistance,fast switching,Halogen-free Product.

/ Applications

PFC

These devices are well suited for high efficient switched mode power supplies, Active power factor correction, electronic lamp ballast based on half bridge topology.

/ Equivalent Circuit



/ Pinning



PIN1 G

PIN 2 4 D

PIN 3 S

/ h_{FE} Classifications & Marking

See Marking Instructions.

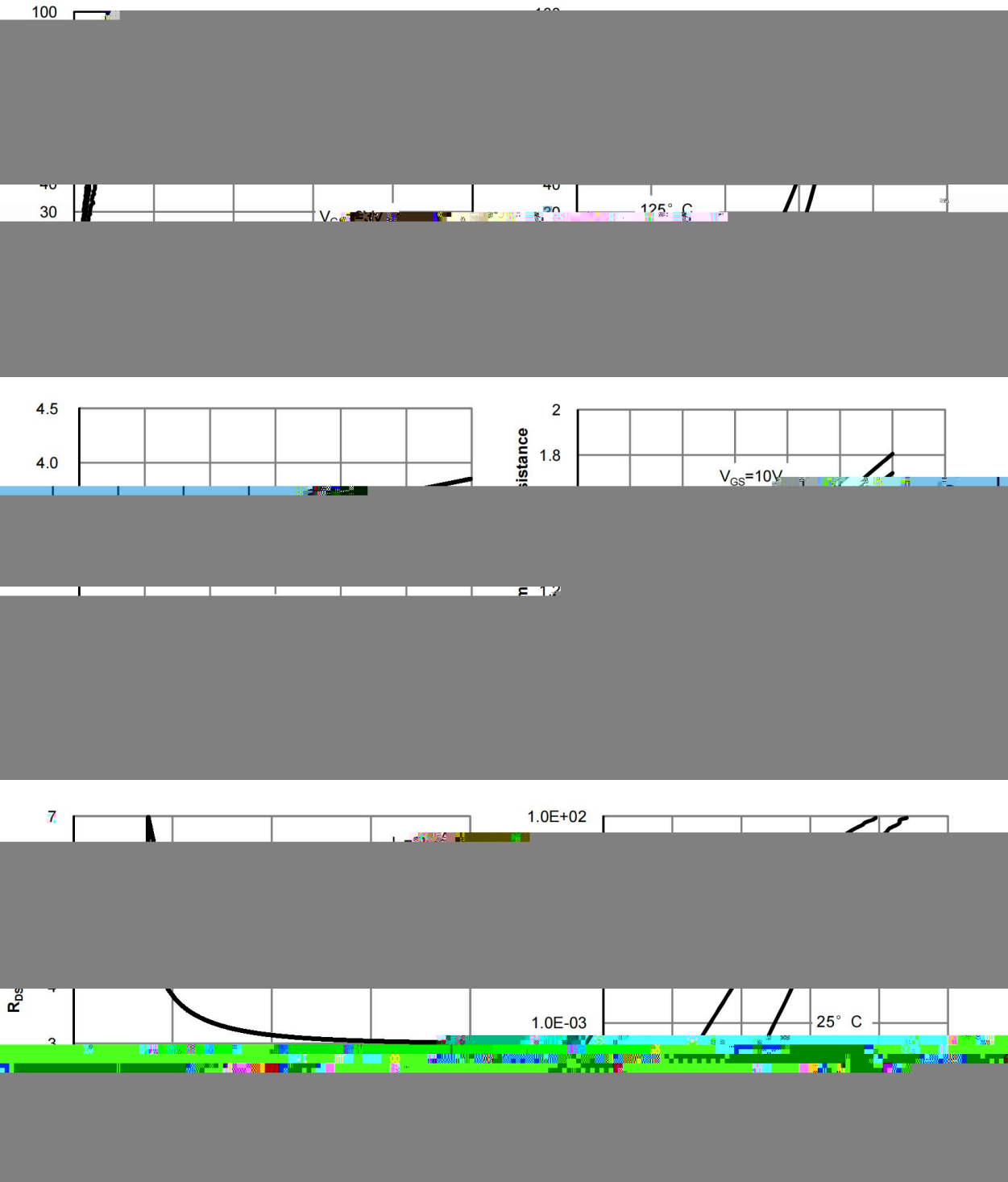
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	$I_D(T_c=25^{\circ}C)$	140	A



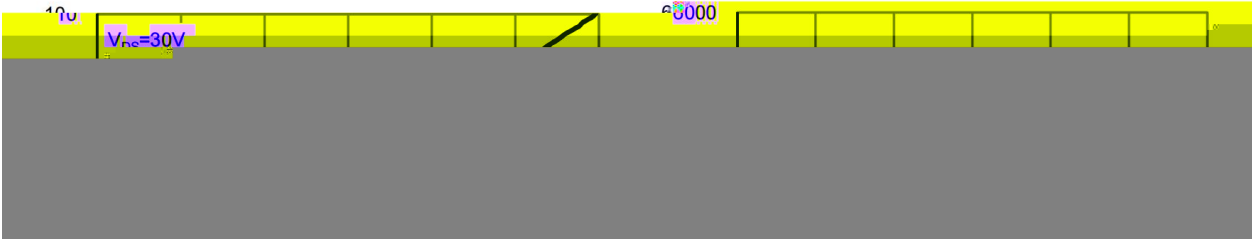
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_g(10V)$	$V_{GS}=10V$ $V_{DS}=30V$ $I_D=20A$		60		nC
Total Gate Charge	$Q_g(4.5V)$			23		
Gate Source Charge	Q_{gs}			16		
Gate Drain Charge	Q_{gd}			3		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=20V$ $R_L=1\Omega$ $R_{GEN}=3\Omega$		13		ns
Turn-On Rise Time	t_r			4		

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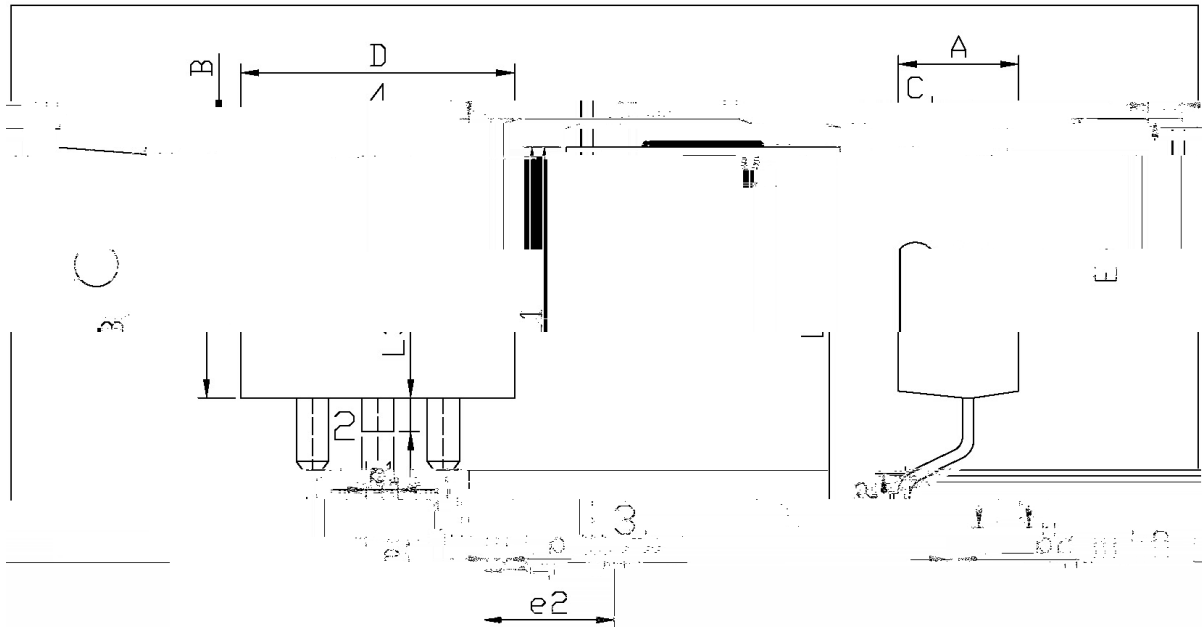
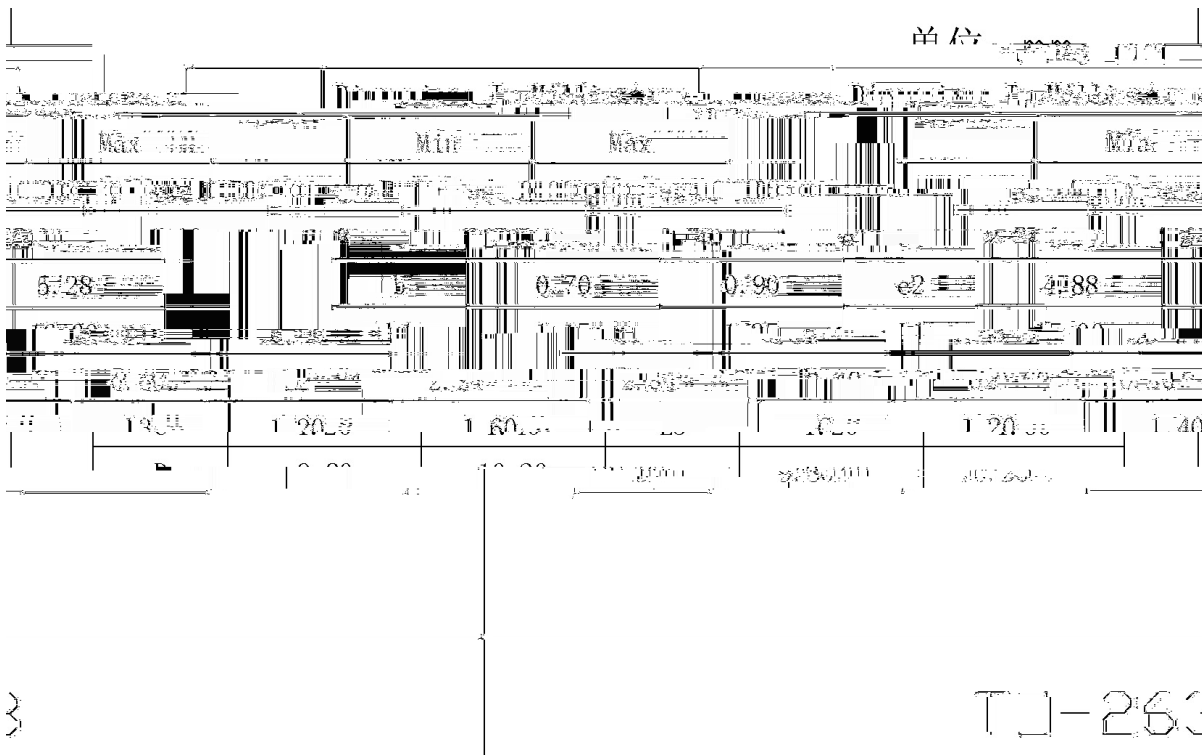
/ Electrical Characteristic Curve



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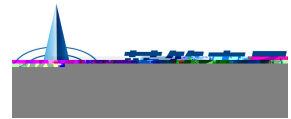


/ Package Dimensions



BRCS030N06SBD

Rev.A Dec.-2021



DATA SHEET