

BRCS009N10SHCD

Rev.A Jul.-2025



DATA SHEET

TO-263-7LA .> // x N ?ú 3 « | • 'ož

N-CHANNEL MOSFET in a TO-263-7LA Plastic Package.

@ f Parameter	... Z Symbol	f › Rating	% y Unit
Drain-Source Voltage	V _{DSS}	100	<
Drain Current ÄDC Å	I _D (T _C =25)	300	'
	I _D (T _C =100)	300	'
Pulsed Drain Current*,**	I _{DM}	1200	'
Gate-Source Voltage	V _{GS}	±20	<
Continuous-Source Current	I _S (T _C =25)	300	'
Single Pulsed Avalanche Energy L=1.0mH	E _{AS}	2592	S 0
Total Power Dissipation	P _D (T _C =25)	750	=
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 175	-
Thermal Resistance-Junction to Ambient**	Steady-State	8b 0'	44
Thermal Resistance-Junction to Case**	Steady-State	8b 0)	0.2

Notes:

* y Pulse width " 300 s, duty cycle " 2 %

** y Surface Mounted on minimum footprint pad area

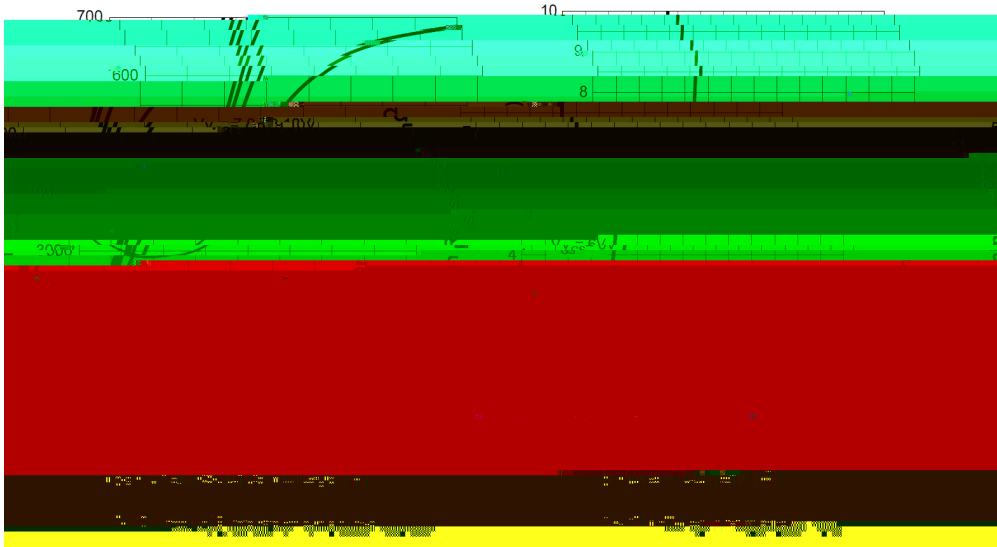
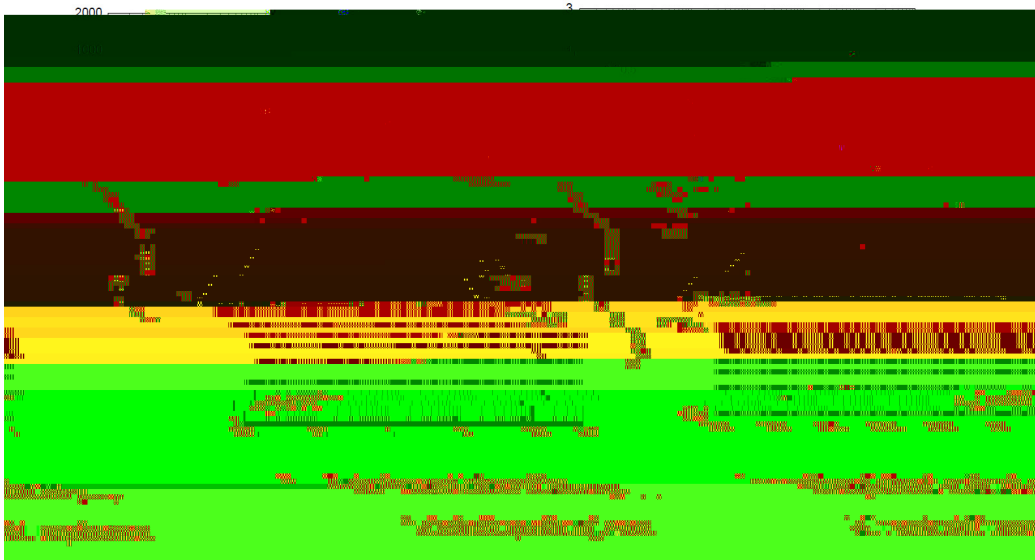
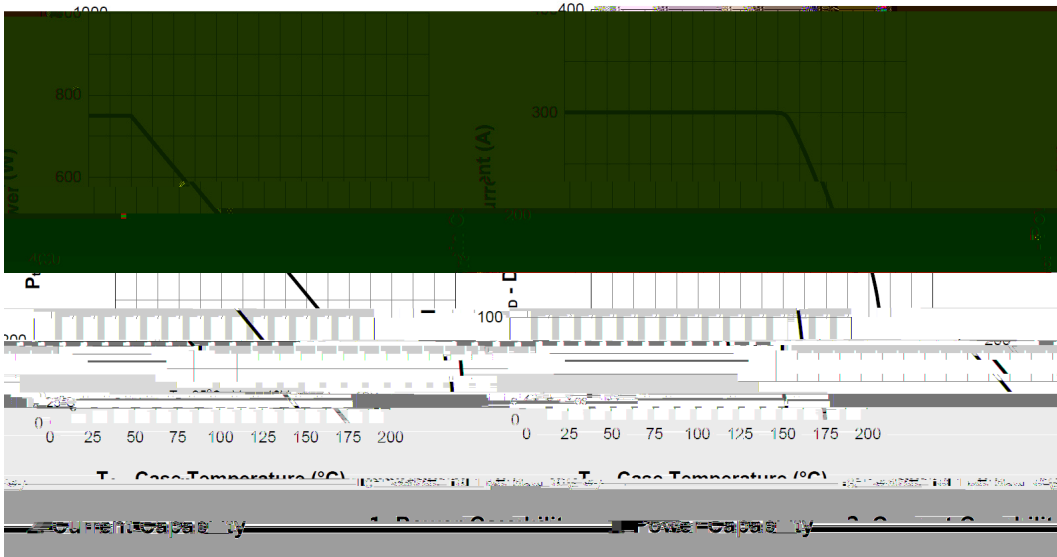
*** y Limited by bonding wire

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
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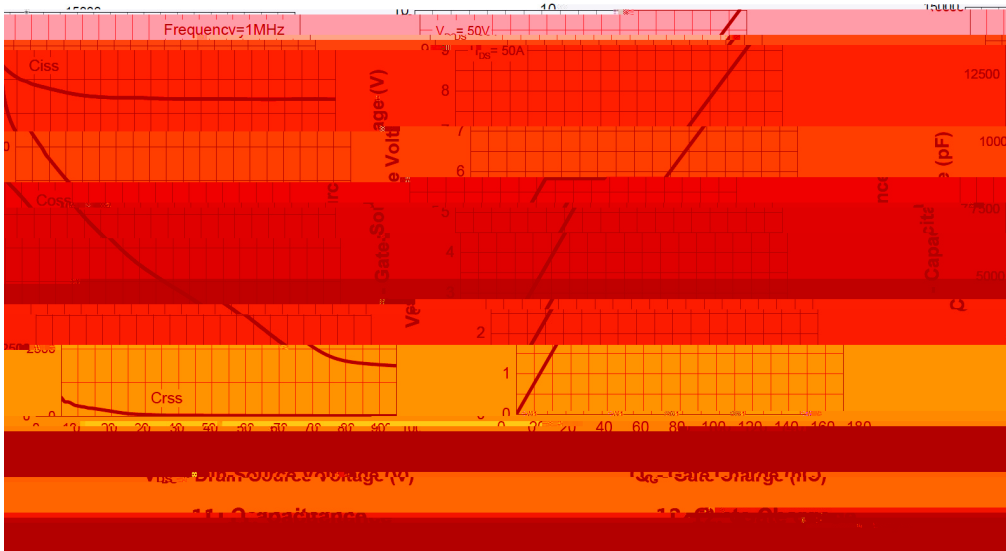
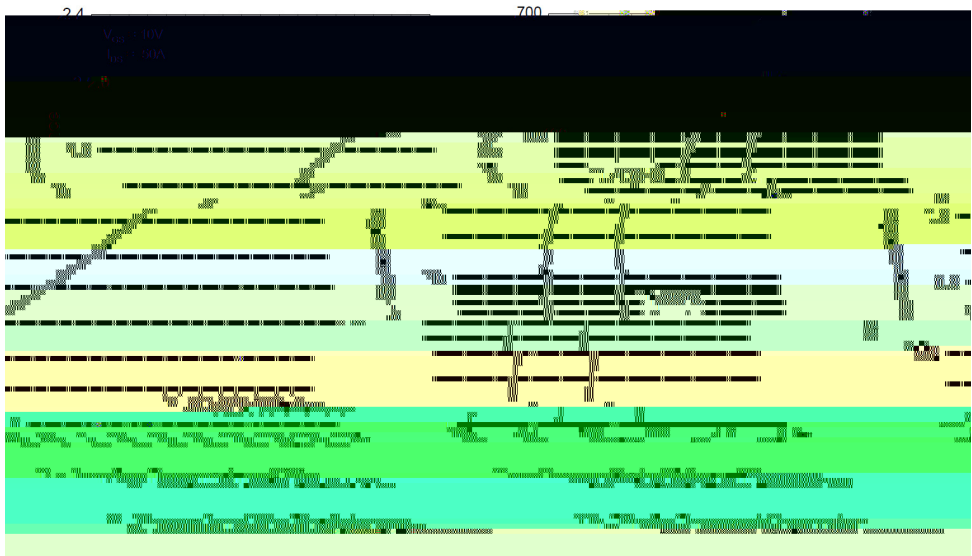
Electrical Characteristics(Ta=25 ;)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	$V_{GS}=10V$ $V_{DS}=50V$ $I_D=50A$		176		nC
Gate Source Charge	Q_{gs}			75		
Gate Drain Charge	Q_{gd}			32		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=1$ $R_{GEN}=3.9$ $I_{DS}=50A$		46		nS
Turn-On Rise Time	t_r			94		
Turn-Off Delay Time	$t_{d(off)}$			69		
Turn-Off Fall Time	t_f			70		

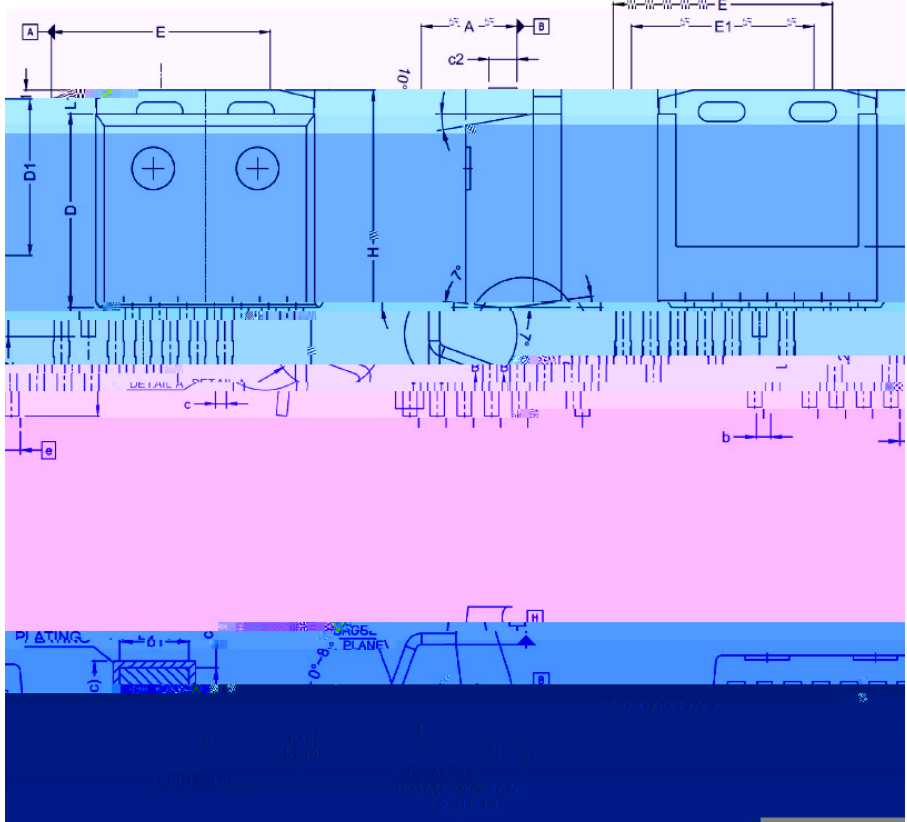
Ω ? d • Ž ç / Electrical Characteristic Curve



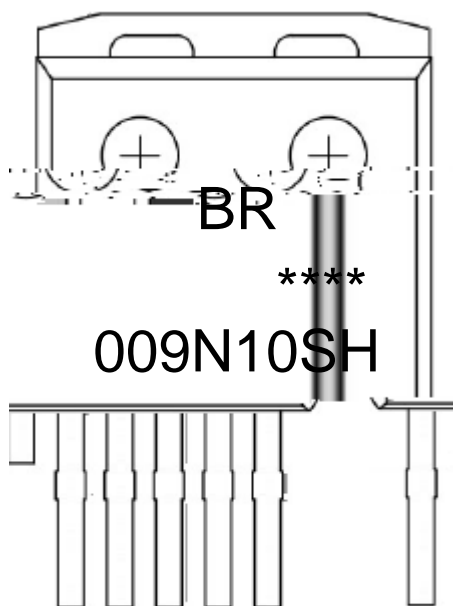
Electrical Characteristic Curve



∅ □ =) ∅ / Package Dimensions



, M y f / Marking Instructions



^a ç y
(8 y , [W A
4 9 . y ° Z W A
y ÿ D Z W A k š ÿ D Z J

Note:

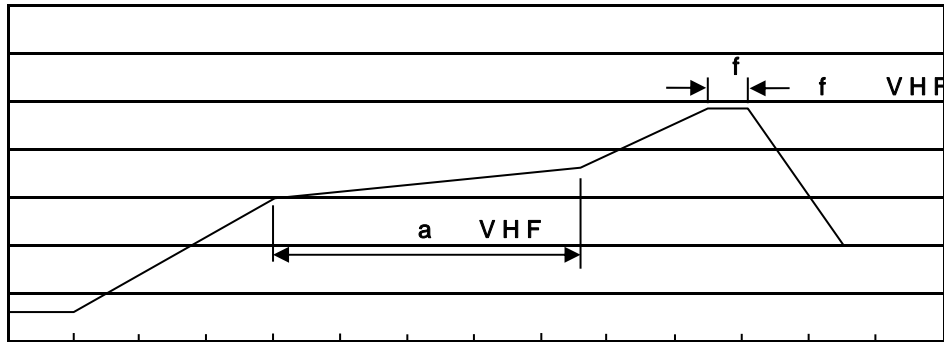
BR: Company Code

009N10SH: Product Type Code

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

šWD t...•Žç (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

7HPSHUDWXUH



7LPH VHF

a ç y

1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;

2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û iH					Dimension ;>û p . (unit Ånm ³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /!ç	Units/Outer Box /!ç	Reel	Inner Box	Outer Boxç
TO-263-7LA	800	1	800	6	4,800	13 s x24	360x360x50	380x335x366

„Đ y f / Notices

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