

5 é / Descriptions

TO-263 .> // x N ?ú 3 « | • 'ož
N-CHANNEL MOSFET in a TO-263 Plastic Package.

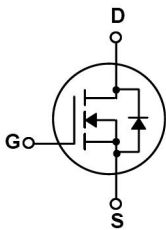
□ ª / Features

$V_{DS}=60V$ $I_D=225A$
 $R_{DS(on)}@10V$ "2.2m (Type. 1.9m)
 $R_{DS(on)}@4.5V$ "3.5m (Type. 2.5m)
—)í D }ož HF Product.

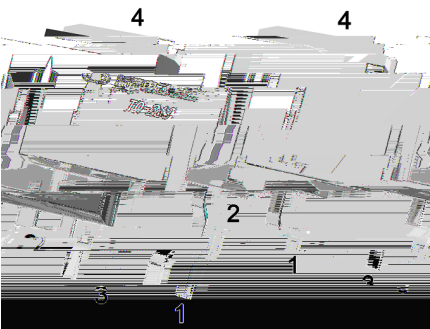
Đ ÷ / Applications

¥ ~ ^ 9 ä | > % ^ k " 6 ,) è y Â 9 ! " ÷ È ã ÿ - ° ož
These devices are well suited for high efficient switched mode power supplies ÈActive power factor correction, electronic lamp ballast based on half bridge topology.

Ã W] Ô · / Equivalent Circuit



• Ô - æ / Pinning



PIN1 y G PIN 2•4 y D PIN 3 y S

, M V / Marking

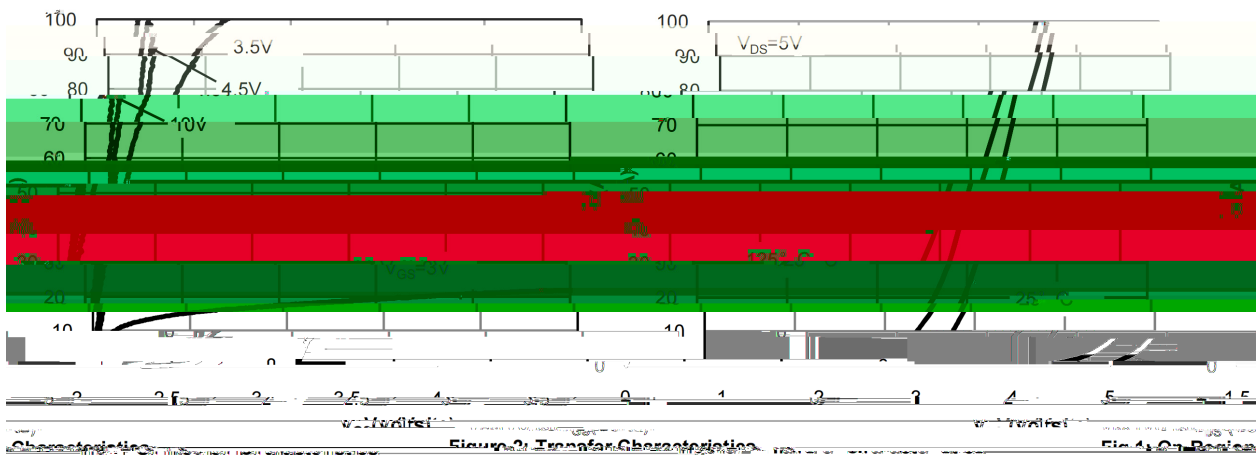
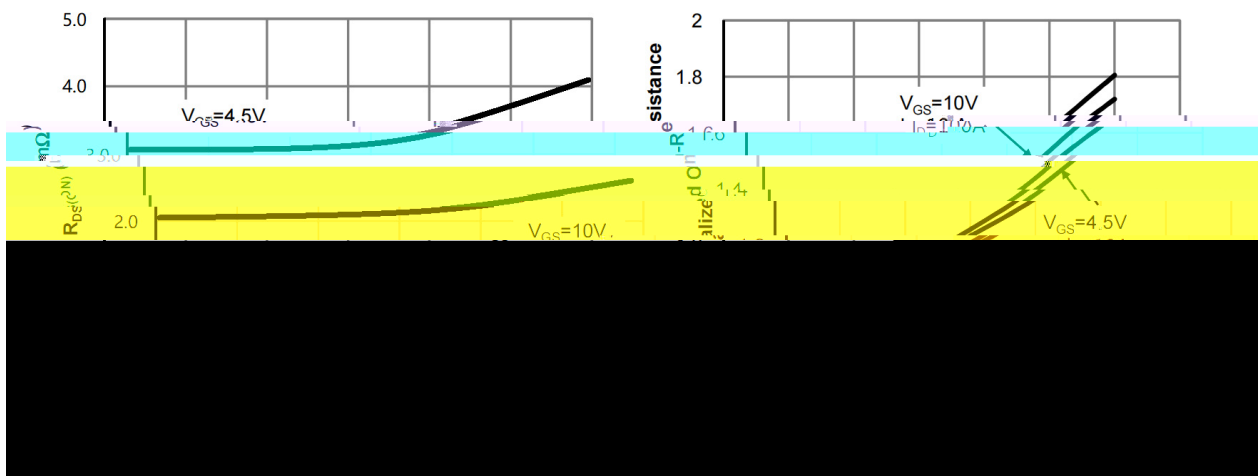
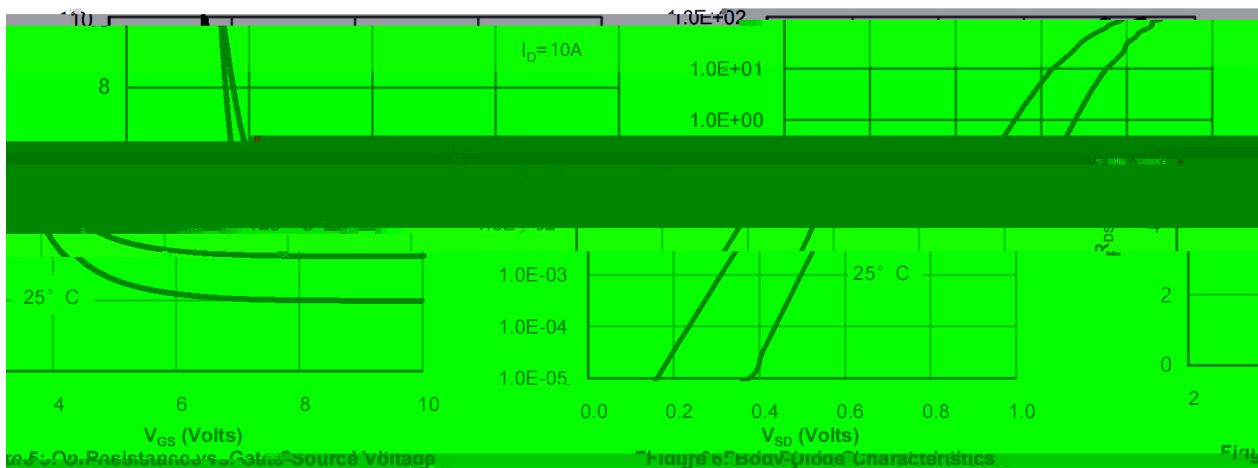
• - ~ ª ¢ ož
See Marking Instructions.

@ f Parameter	... Z Symbol	f > Rating	% y Unit
Drain-Source Voltage	V _{DSS}	60	V
Drain Current	I _D (T _c =25)	225	A
Pulsed Drain Current	I _{DM}	646	A
Gate-Source Voltage	V _{GS}	±20	V
Single Pulsed Avalanche Energy L=0.5mH	E _{AS}	380	mJ
Avalanche Current	I _{AS}	30.8	A
Total Power Dissipation	P _D (T _c =25)	125	W
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	Steady-State R _{θJA}	50	

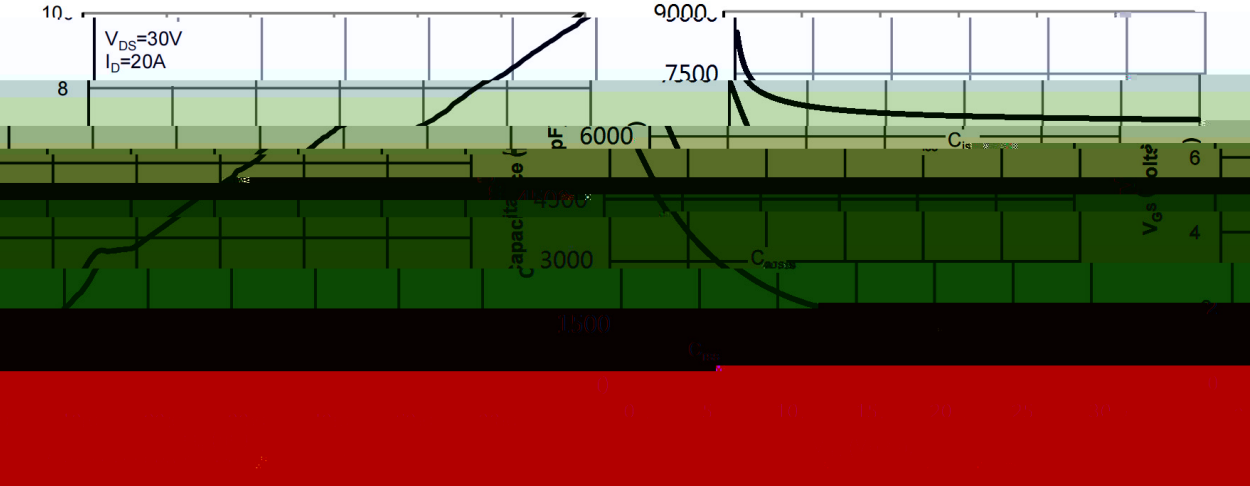
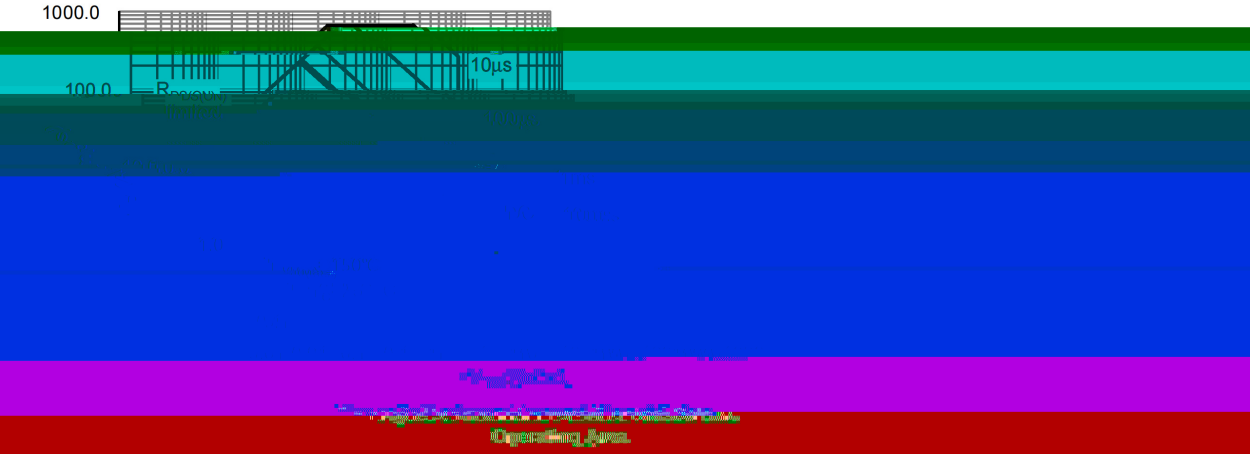
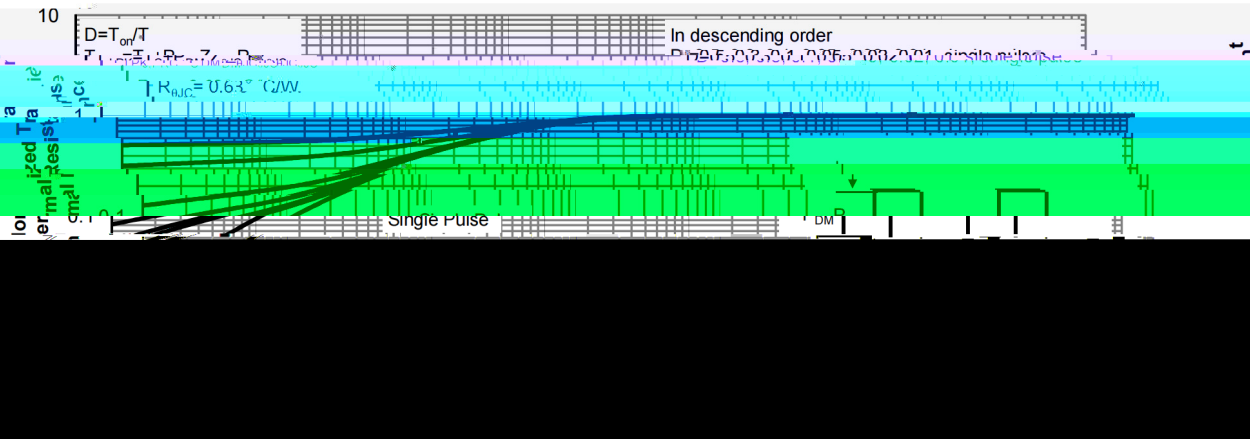
Electrical Characteristics(Ta=25℃ ;)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Qg(10V)	VGS=10V VDS=30V ID=20A		60		nC
Total Gate Charge	Qg(4.5V)			23		
Gate Source Charge	Qgs			16		
Gate Drain Charge	Qgd			3		
Turn-On Delay Time	td(on)	VGS=10V VDS=20V RL=1 RGEN=3		13		ns
Turn-On Rise Time	tr			4		
Turn-Off Delay Time	td(off)			47		
Turn-Off Fall Time	tf			6.5		

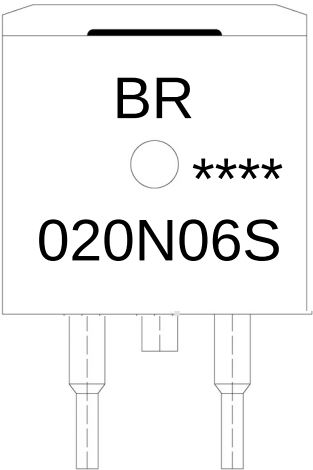
Electrical Characteristic Curve



Electrical Characteristic Curve



, M y f / Marking Instructions



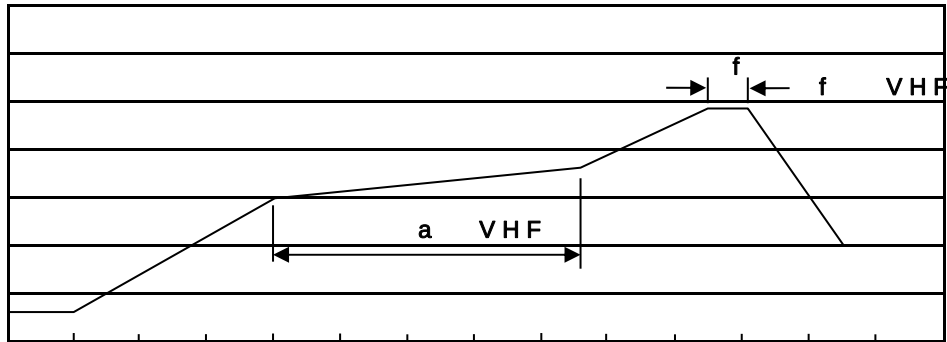
a ϕ y
(8 y , [W A
4 9 y ° Z W A
y ÿ D Z W A k š ÿ D Z J

Note:
BR: Company Code
020N06S: Product Type Code
****: Lot No. Code, code change with Lot No



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

7HPSHUDWXUH



7LPH VHF

a ç y

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

20• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;

30•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 H					Dimension ;>û p . (unit /mm ³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
TO-263	800	1	800	6	4,800	13 s ×24	360×360×50	380×335×366

ì' x / TUBE

Package Type 7>û ~ E	Units ;>û H					Dimension ;>û p . (unit /mm ³)		
	Units/Tube /•1×	Tubes/Inner Box •1× /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Tube•1×	Inner Box	Outer Boxç
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

„Đ y f / Notices