/ Descriptions

N TO-3PH

N-Channel MOSFET in a TO-3PH Plastic Package.

/ Features

Crss (85pF) dv/dt

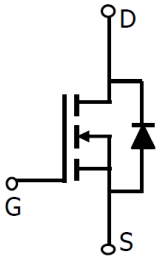
Low gate charge, Low Crss (typical 85pF), Fast switching, 100% avalanche tested,Improved dv/dt capability.

/ Applications

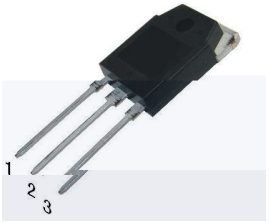
UPS

High efficiency switch mode power supplies, Electronic lamp ballasts based on half bridge, UPS.

/ Equivalent Circuit



/ Pinning



PIN1 Gate PIN 2 Drain PIN 3 Source

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current -continuous	I_D(Tc=25)	25.0*	A
	I_D(Tc=100)	15.5*	A
Drain Current -pulse note 1	I_{DM}	25*	A
Gate-Source Voltage	V_{GSS}	30	V
Single Pulsed Avalanche Energy note 2	E_{AS}	550	mJ
Avalanche Current note 1	I_{AR}	25.0	A
Repetitive Avalanche Current note 1	E_{AR}		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Off –Characteristics						
Drain-Source Voltage	BV_{DSS}	I_D=250μA, V_{GS}=0V	600			V
Breakdown Voltage Coefficient	BV_{DSS} /ΔTJ	I_D=250μA, referenced to 25		0.5		V/
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=600V,V_{GS}=0V,T_C=25			1	uA
		V_{DS}=480V, T_C=125			10	uA
Gate-body leakage current, forward	I_{GSSF}	V_{DS}=0V, V_{GS} =30V			100	nA
Gate-body leakage current, reverse	I_{GSSR}	V_{DS}=0V, V_{GS} =-30V			-100	nA
On-Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS} , I_D=250μA	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS} =10V , I_D=12.5A		0.24	0.28	Ω
Forward Transconductance	g_{fs}	V_{DS} = 40V , I_D=12.5A note 4		18		S
Dynamic Characteristics						
Input capacitance	C_{iss}	V_{DS}=25V, V_{GS} =0V, f=1.0MHz		2310	2920	pF
Output capacitance	C_{oss}			1270	1660	pF
Reverse transfer capacitance	C_{rss}			85	120	pF
Switching –Characteristics						
Turn-On delay time	t_d(on)	V_{DD}=250V,I_D=25A,R_G=25Ω note 4 5		60	128	ns
Turn-On rise time	tr			130	270	ns
Turn-Off delay time	t_d(off)			220	445	ns
Turn-Off Fall time	t_f			70	145	ns

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2 L=5.0mH, I_{AS}=25A, V_{DD}=50V, R_G=25 Ω, T_J=25

3 I_{SD} ≤25A,di/dt ≤200A/μs, V_{DD}≤BV_{DSS}, T_J=25

4 ≤300μs, ≤2

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Note:

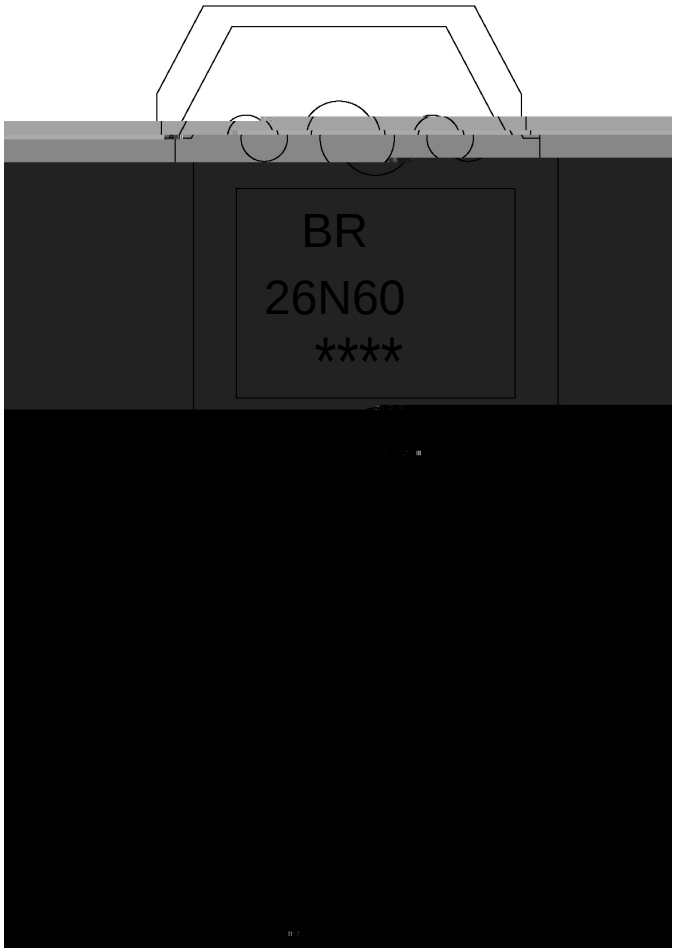
1 Pulse width limited by maximum junction temperature

2 L=5.0mH, I_{AS}=25A, V_{DD}=50V, R_G=25 ,Starting T_J=25

3 I_{SD} 25A,di/dt

/ Electrical Characteristic Curve

/ Marking Instructions



BR:

26N60

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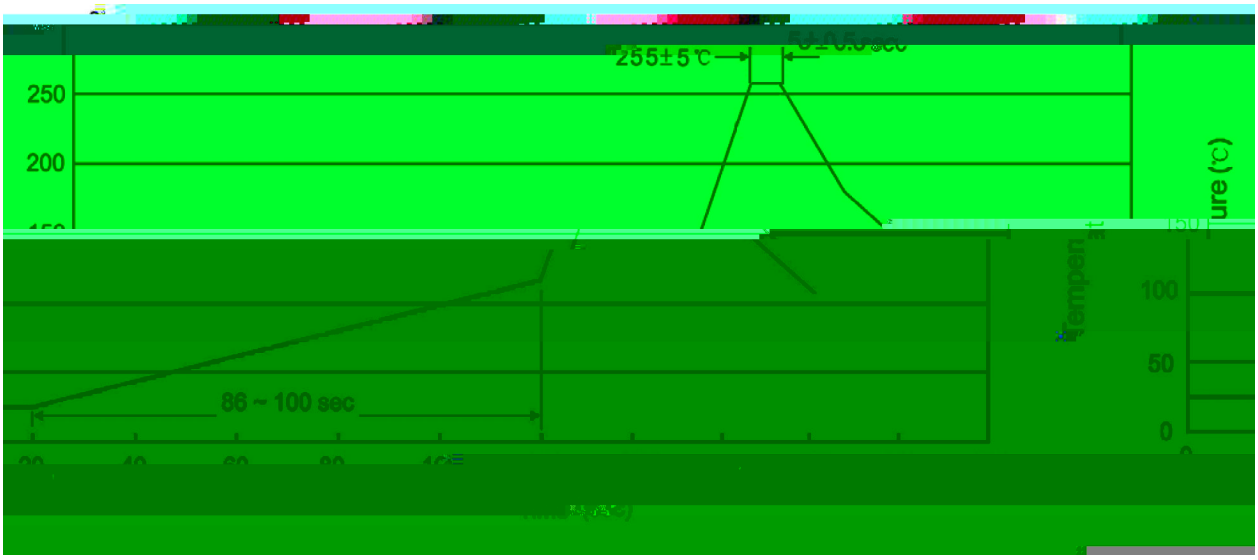
Note:

BR:	Company Code.
26N60:	Product Type.
****:	Lot No. Code, code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



					Note:
1		25 150		60 90sec;	1.Preheating:25~150 , Time:60~90sec.
2		255±5		5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3			2 10 /sec.		3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-3PH	30	15	450	5	2250	497.5×46×8	555×164×50	575×290×180

/ Notices