

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	EIRFP250N-T8
▶ Overseas	Part Number	EV-IRFP250N-T8
▶ Equivalent	Part Number	IRFP250N

"T8" means TO-247

EV is the abbreviation of name EVVO

半导体分立器件 semiconductor discrete devices

RFP250N

一、主要参数 (Main Parameters):

功率 VDMOS 场效应晶体管, V_{DSX} : 200V, I_D : 30A, P_{tot} : 210W

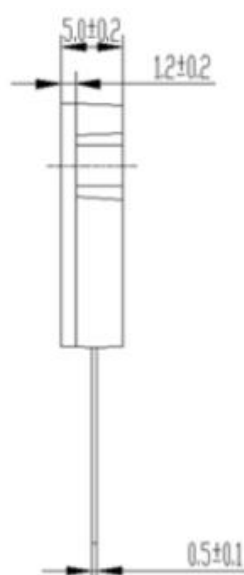
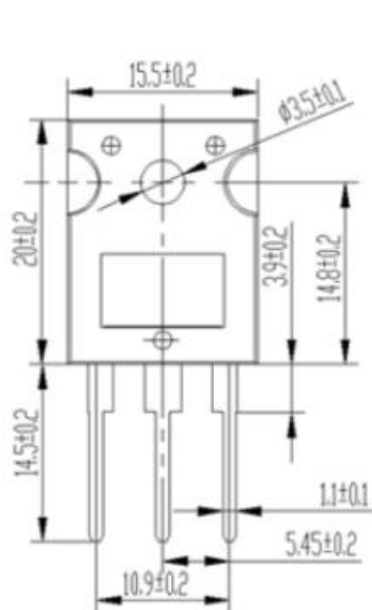
二、产品特性 (Features):

1)快速切换 2)频率特性优 3)RoHs 产品

三、用途 (Applications):

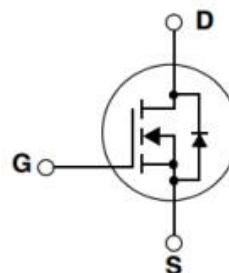
1)开关电路 2)其它电子电路

四、外型尺寸 (Package and outline):



1.Gate
2.Drain
3.Source

TO-247



五、最大极限值 (Absolute Ratings): ($T_c=25^{\circ}\text{C}$)

参数名称 Description	符 号 Symbol	规范值 Value	单 位 Unit
最高漏源电压	V_{DSX}	200	V
连续漏极电流 $T_c=25^{\circ}\text{C}$	I_D	30	A
脉冲漏极电流	I_{DM}	120	A
栅 源 电 压	V_{GS}	± 20	V
耗散功率 $T_c=25^{\circ}\text{C}$	P_{tot}	210	W
结 温	T_j	150	$^{\circ}\text{C}$

六、电特性 (Electrical Characteristic):

参数名称 Description	符 号 Symbol	测试条件 Tests Conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
漏源反向电压	V _{DS}	V _{GS} =0V， I _D =250 μ A	200			V
通 态 电 阻	R _{DS(on)}	V _{GS} =10V， I _D =18A			0.18	Ω
阈 值 电 压	V _{GS(th)}	V _{DS} = V _{GS} ， I _D =250 μ A	2.0	3.4	4.0	V
源漏正向压降	V _{SD}	V _{GS} =0V， I _{DS} =18A			1.5	V
漏源漏电流	I _{DSS}	V _{DS} =200V， V _{GS} =0V			1	uA
源栅漏电流	I _{GSS(F)}	V _{GS} =+30V			100	n A
源栅漏电流	I _{GSS(R)}	V _{GS} =-30V			-100	n A
输 入 电 容	C _{iss}	V _{GS} =0V， V _{DS} =25V f=1.0MHz		1140		pF
输 出 电 容	C _{oss}			180		pF
反向传输电容	C _{rss}			25		pF
a: 脉冲测试 tp≤300 μ S， δ ≤2%						

七、注意事项 (Note):

- 1.在应用设计时,要使器件工作在安全区,不要超过器件的最大极限值,否则会影响整机的可靠性。
- 2.使用中应避免产生过流、过压和过热,必须采取有效的保护措施。
- 3.使用时,请将器件平整地安装在散热片上,请尽量缩小安装孔,并在安装面均匀涂上导热硅脂,同时核对散热片的厚度和面积是否标准,以免影响散热效果。
- 4.在安装时,请注意减少机械应力的产生,由于气动螺丝刀易产生较大冲击,安装螺丝请使用电动螺丝刀,电动螺丝刀扭矩不大于 7KG • cm,以避免由此引起的产品失效。
- 5.安装在 PCB 板上的器件易受焊槽中流动的焊剂或手工焊接高温影响。距离器件主体 1.5mm 处,焊接条件为 260℃不超过 8 秒,280℃不超过 2.5 秒,请尽可能在短时间内完成焊接。
- 6.产品入库后请尽快使用,产品储存温度为+5℃~+35℃,湿度为 40%~75%,应避免产品放置于高温、高湿或温度和湿度剧烈变化的场所,避免储存在多尘或有害气体和各种射线的场所,避免阳光直射,建议三个月内使用完毕。
- 7.使用时应对本产品进行质量检测,如有问题三天内告知本公司,公司承诺 24 小时内提供解决方案。
- 8.三十天内未上机产品凭送货单据及测试报告可以换货或退货,已使用过产品不予退换。
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