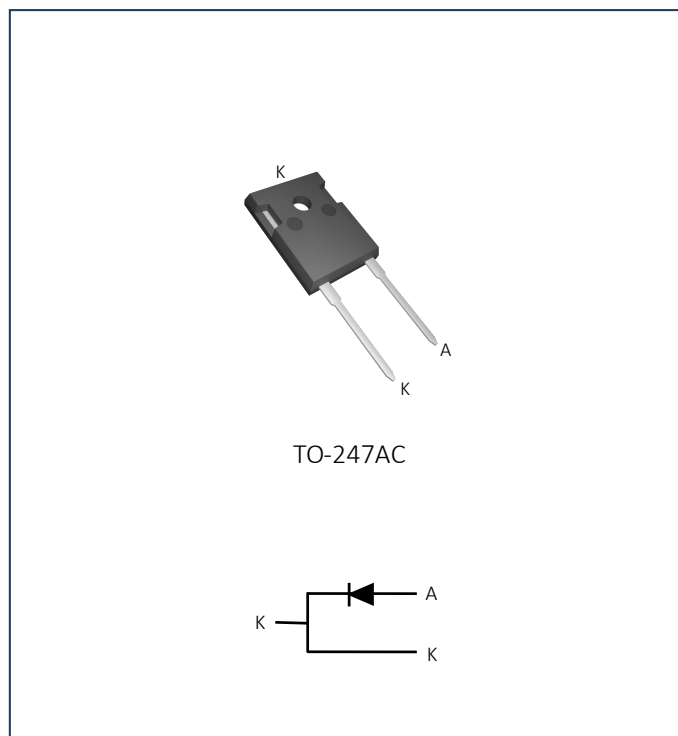


DSE30S07P

超快软恢复特性二极管整流器

Ultra Soft Recovery Rectifier

封装外形 Package



主要参数 Device summary

Symbol	Value
$I_F(AV)$	30A
V_{RRM}	700V
$V_F(typ)$	1.22V@30A 125°C
$I_R(typ)$	0.05mA@700V 125°C
$T_{j(max)}$	175°C

机械数据 Mechanical Data

- 模塑料符合 UL 94 V-0 易燃等级，符合 RoHS 标准
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- 端子：镀锡引线，可焊接 J-STD-002 和 JESD22-B102
Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- 极性：本体标记
Polarity: As marked on body

产品特点 Features

超软恢复时间 Ultra soft recovery times
超快恢复时间 Ultra-fast recovery time
低正向压降 Low forward voltage
高结温 High Junction temperature
低漏电 Low leakage current
高可靠性 High reliability
环保产品 RoHS product

最大额定值 Maximum ratings

项目 Parameter	符合 Symbol	数值 Value	单位 Unit
反向重复峰值电压 Peak repetitive reverse voltage	V _{RRM}	700	V
平均正向电流 Average forward current	I _{F(AV)}	30	A
浪涌电流 Non-repetitive single pulse surge current t=8.3ms	I _{FSM}	300	A
结温 Junction temperature	T _j	-55~+175	°C
存储温度 Storage temperature	T _{STG}	-55~+175	°C

电特性 Electrical characteristics(T_c=25°C)

项目 Parameter	测试条件 Tests conditions		数值 Value			单位 Unit
			最小值(min)	典型值(typ)	最大值(max)	
V _{RRM}	I _R =0.05mA		700	-	-	V
I _R 反向漏电流	T _j =25°C	V _R =V _{RRM}	-	-	0.05	mA
	T _j =125°C		-	-	0.5	
V _F 正向电压	T _j =25°C	I _F =30A	-	-	1.9	V
	T _j =125°C	I _F =1A	-	0.58	-	
		I _F =15A	-	1.03	-	
		I _F =30A	-	1.22	-	
T _{rr} 反向恢复时间	T _j =25°C	Reverse recovery condition I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	-	-	35	nS

热特性 Thermal characteristics(T_c=25°C)

Parameter	Symbol	Value	Unit
热阻 Thermal resistance from junction to case	R _{th(j-c)}	1.0	°C/W

典型特征曲线图 Typical Characteristic Curve

图 1: 正向电流与外壳温度

FIG 1:I_F-T_c

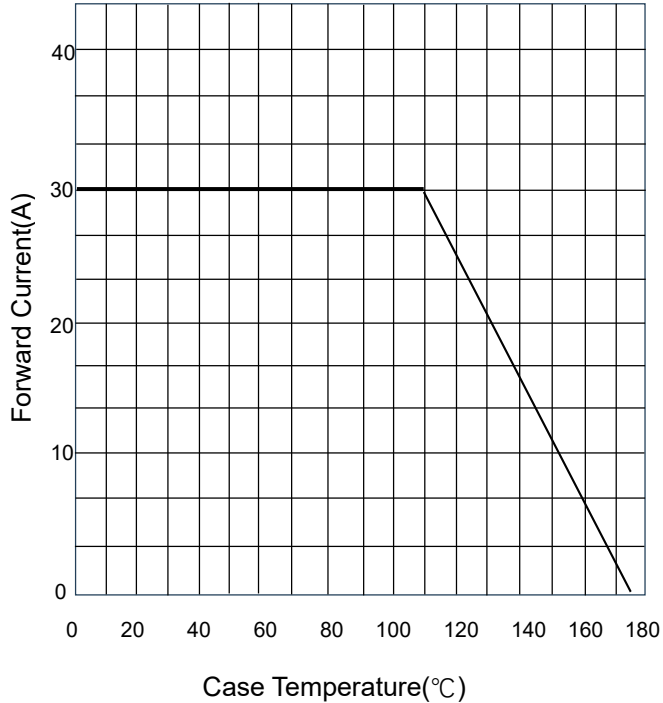


图 2: 正向浪涌循环次数

FIG 2: Surge Forward Current Capability

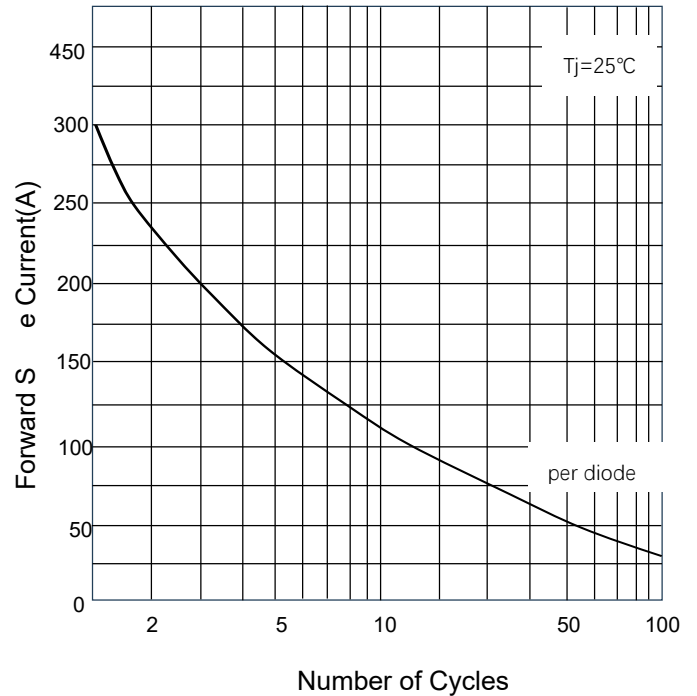


图 3: 反向电压与反向电流

FIG 3: V_R-I_R

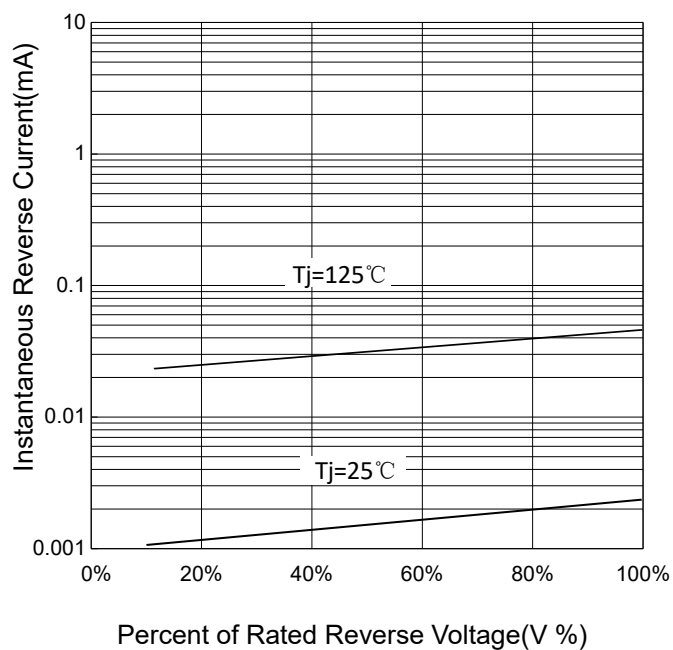
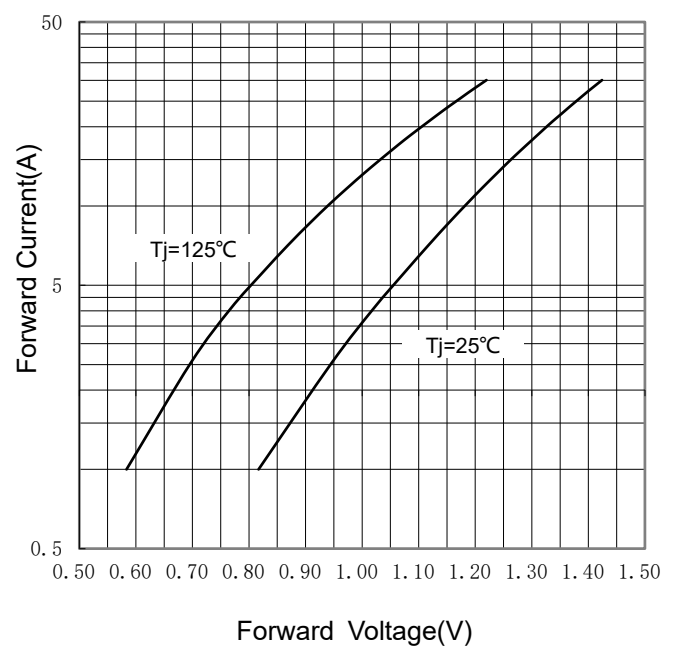
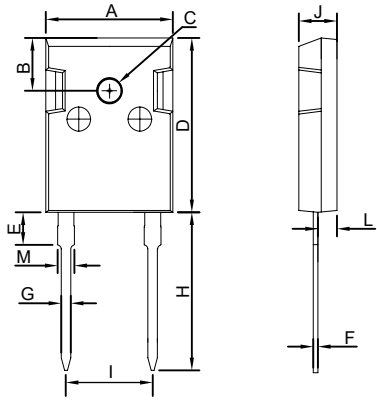


图 4: 正向电流与正向电压

FIG 4: I_F-V_F



外形尺寸图及焊盘布局参考 Outline Dimensions and Pad Layout Reference

TO-247AC		Dim	Min	Typ	Max
		A	15.80	16.00	16.20
		B	6.30	6.50	6.70
		C	3.05	3.20	3.35
		D	21.20	21.50	21.80
		E	3.80	4.00	4.20
		F	0.50	0.60	0.70
		G	1.00	1.20	1.40
		H	19.20	19.50	19.70
		I	10.70	10.90	11.10
		J	4.60	4.80	5.00
		L	2.20	2.40	2.60
		M	1.90	2.10	2.30
		尺寸单位: (mm) Dimensions in millimeters			

订购信息 Ordering Information

订单型号 Order code	印记 Marking	封装 Package	重量 Weight (g)	包装形式 Packing	基本包装 Base qty (pcs)	盒 Box (pcs)	箱 Carton (pcs)
WDSE30S07P000P	DSE30S07P	TO-247AC	5.82	管装 Tube	30	600	2400

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