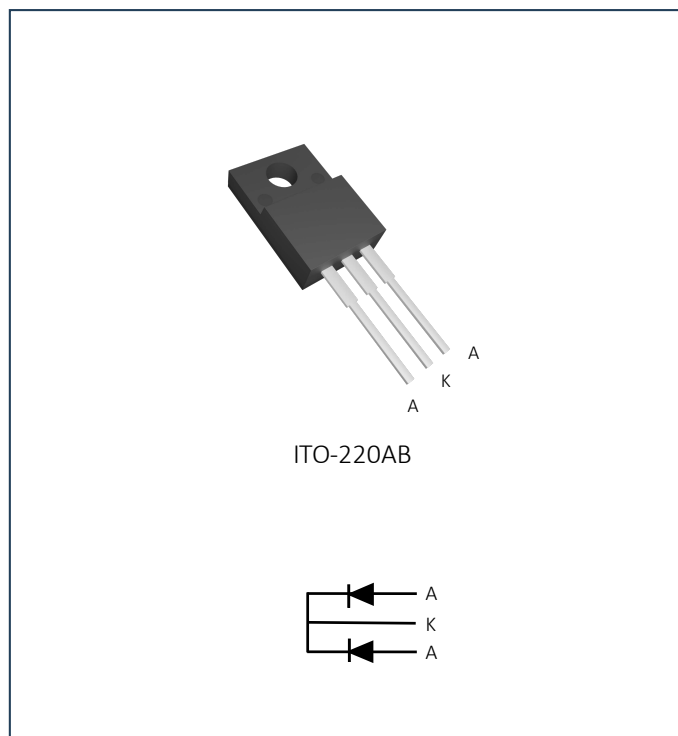


DSEK30S03F

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}	300V
$V_{F(typ)}$	0.88V@15A 125°C
$I_{R(typ)}$	0.01mA@300V 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

ITO-220AB 绝缘电压

ITO-220AB Package Insulated voltage:

≥3000V V_{DC} t=100mS

最大额定值 Maximum ratings

项目 Parameter	符合 Symbol	数值 Value	单位 Unit
反向电压 Peak repetitive reverse voltage	V_{RRM}	300	V
平均正向电流 Average forward current	$I_{F(AV)}$	30	A
	per diode	15	A
浪涌电流 Non-repetitive single pulse surge current $t=8.3ms$	I_{FSM}	200	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($T_c=25^\circ C$)

项目 Parameter	测试条件 Tests conditions		数值 Value			单位
			最小值(min)	典型值(typ)	最大值(max)	Unit
反向电压 V _{RRM}	I _R =0.05mA		300	-	-	V
反向漏电流 I _R	T _J =25℃	V _R =V _{RRM}	-	-	0.015	mA
	T _J =125℃		-	-	0.15	
正向电压 V _F	T _J =25℃	I _F =15A	-	-	1.15	V
	T _J =125℃	I _F =1A	-	0.54	-	
		I _F =7.5A	-	0.76	-	
		I _F =15A	-	0.88	-	
反向恢复时间 T _{rr}	T _J =25℃	Reverse recovery condition I _F =0.5A,I _R =1.0A,I _{rr} =0.25A	-	-	35	nS

热特性 Thermal characteristics($T_c=25^\circ C$)

项目 Parameter	符合 Symbol	数值 Value	单位 Unit
热阻 Thermal resistance from junction to case	$R_{th(j-c)}$	4.5	°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

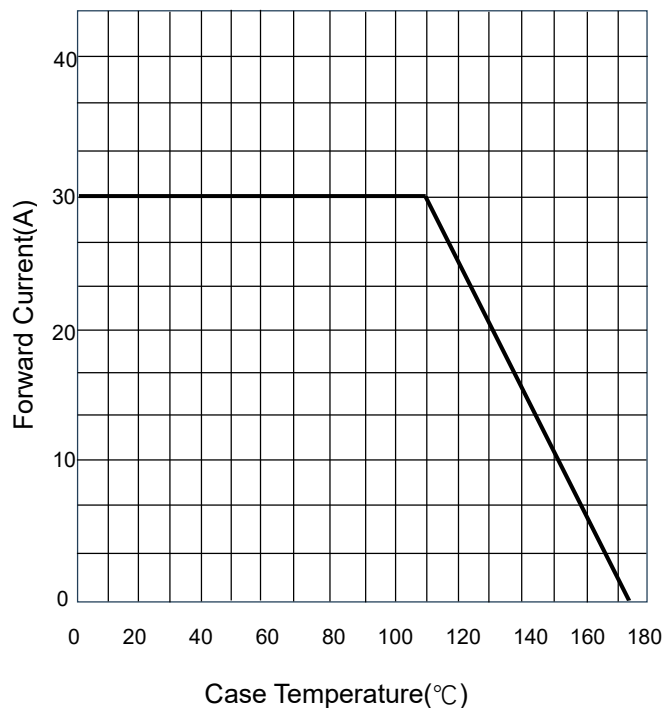


图 2: 正向浪涌循环次数

FIG 2: Surge Forward Current Capability

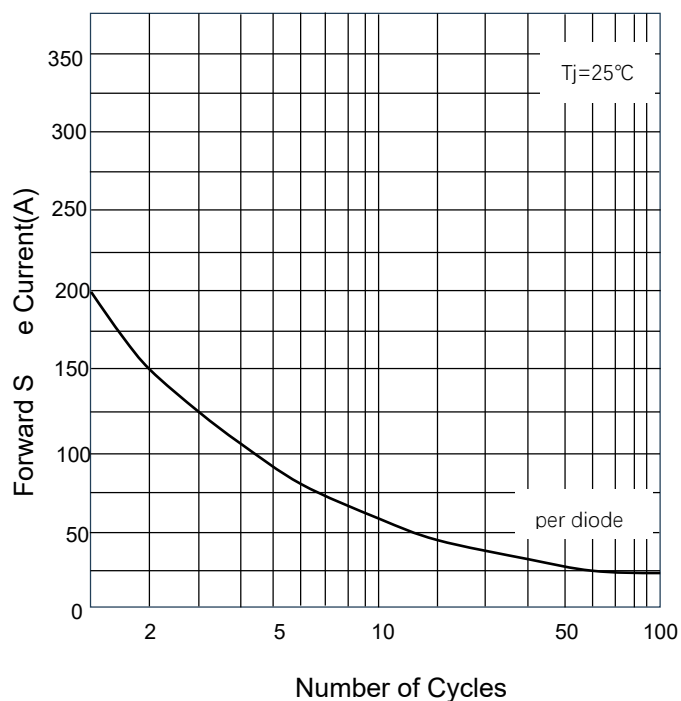


图 3: 反向电压与反向电流

FIG 3: V_R - I_R

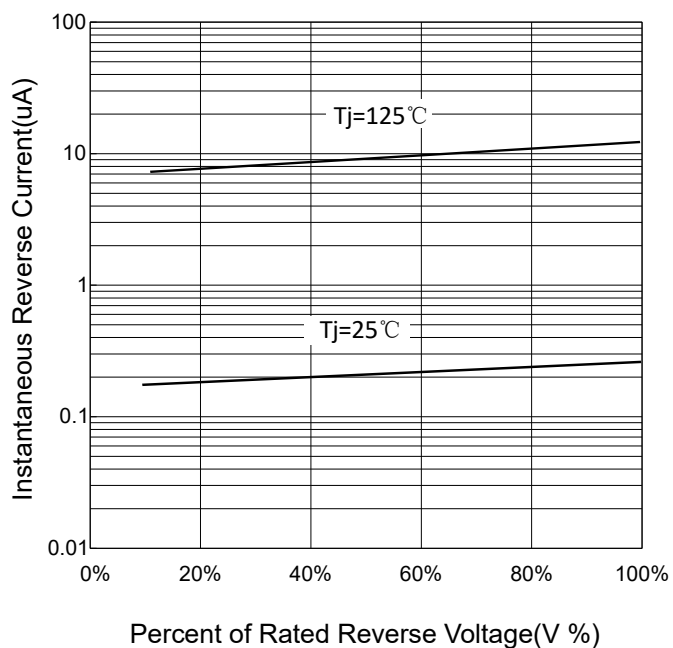
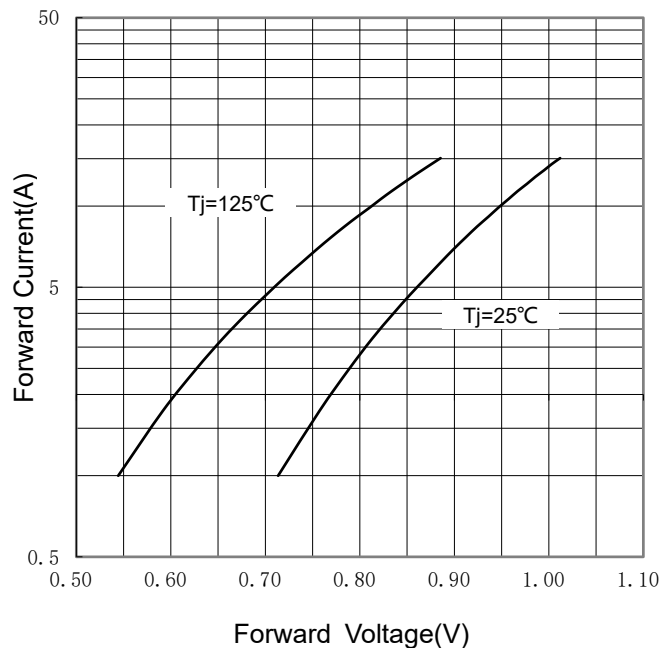
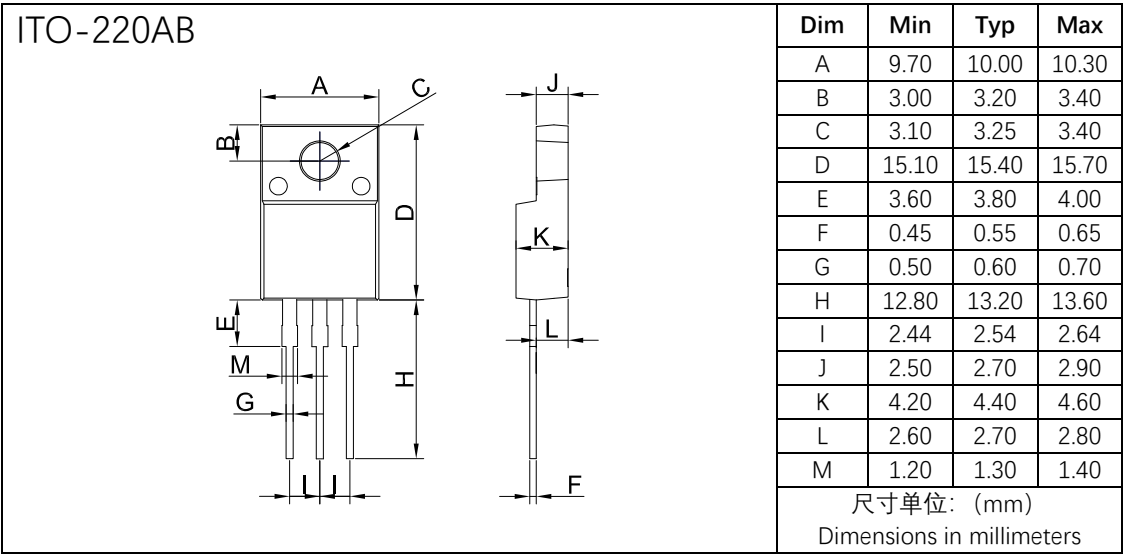


图 4: 正向电流与正向电压

FIG 4: I_F - V_F



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



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)
WDSEK30S03F000P	DSEK30S03F	ITO-220AB	1.7	管装 Tube	50	1000	5000

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