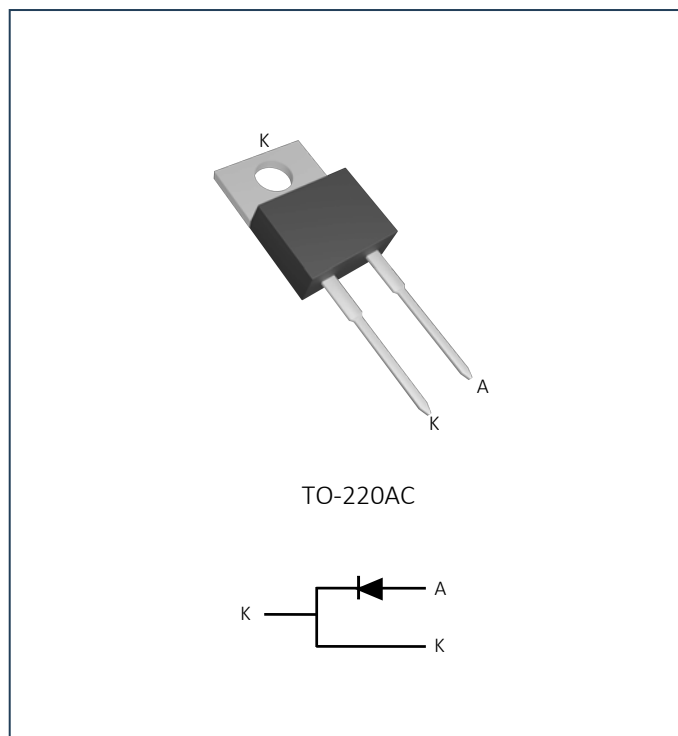


封装外形 Package



主要参数 Device summary

Symbol	Value
$I_F(AV)$	20A
V_{RRM}	650V
$V_F(typ)$	1.43V/20A@175°C
$I_R(typ)$	0.019mA@175°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

- 高频运行 High frequency operation
- 超快开关速度 Ultra fast switching speed
- 零反向恢复电流 Zero reverse recovery current
- 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
反向电压 Peak repetitive reverse voltage	V _{RRM}	650	V
正向电流 forward current	I _{F(AV)}	T _C =25 °C 95	A
		T _C =130 °C 20	
浪涌电流 Non-repetitive single pulse surge current t=10ms	I _{FSM}	190	A
功率耗散 Power Dissipation	P _{tot}	T _C =110 °C 161	W
结温 Junction temperature	T _J	-55~+175	°C
存储温度 Storage temperature	T _{STG}	-55~+175	°C

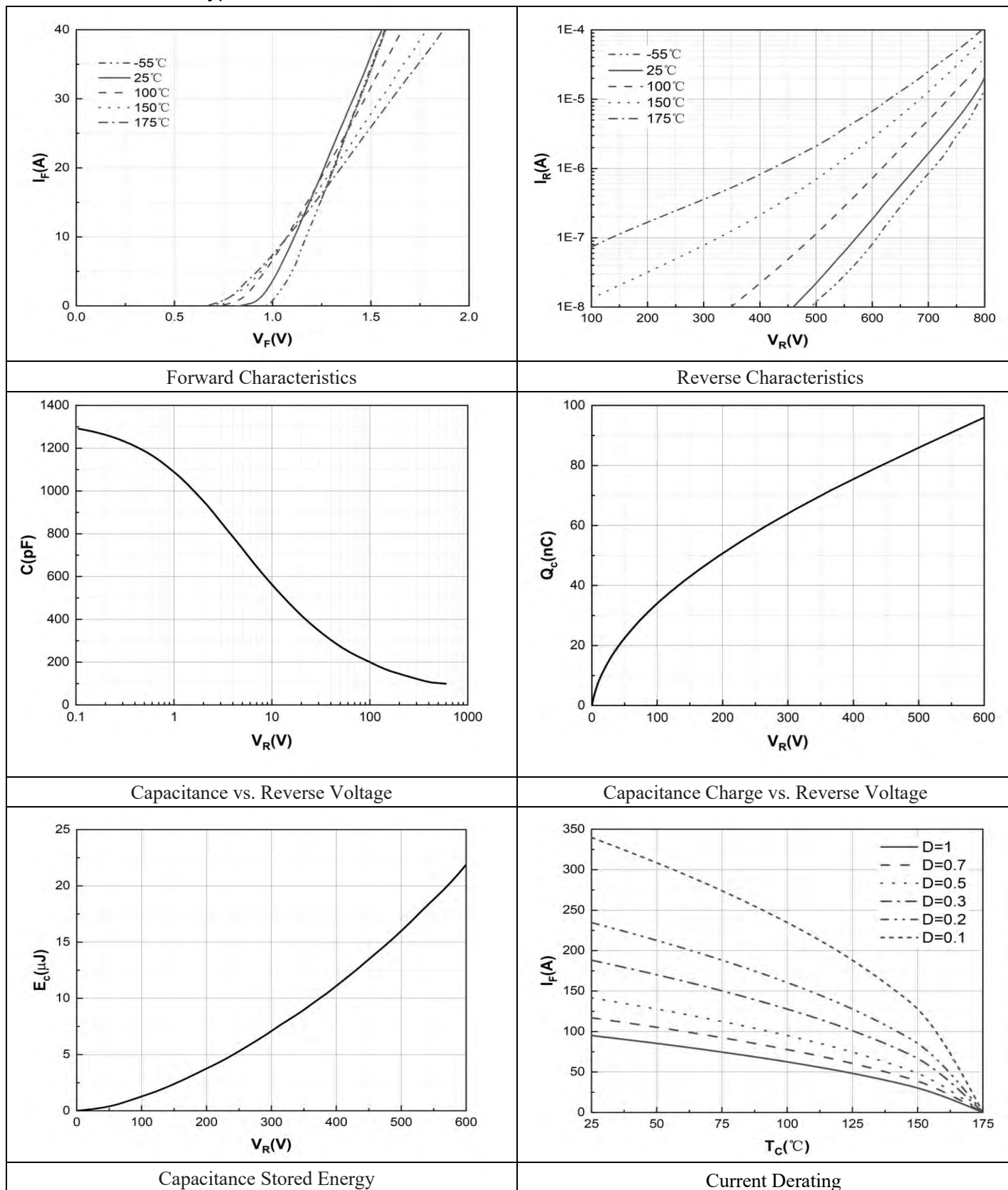
电特性 Electrical characteristics(T_C=25°C)

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)	
反向电压 V _{RRM}	I _R =0.05mA		650	-	-	V
反向漏电流 I _R	T _J =25°C	V _R =650V	-	0.001	0.05	mA
	T _J =175°C		-	0.019	0.2	
正向电压 V _F	T _J =25°C	I _F =20A	-	1.32	1.46	V
	T _J =175°C		-	1.43	1.8	
总电容电荷量 Q _C	T _J =25°C	V _R =400V Q _C = ∫ 0VRC(V)dVp	-	76	-	nC
总电容量 C	T _J =25°C	V _R =1V, f=1MHZ		1091		pF
		V _R =300V, f=1MHZ		123		
		V _R =600V, f=1MHZ		104		
电容储存能量 E _C		V _R =400V		11.3		μJ

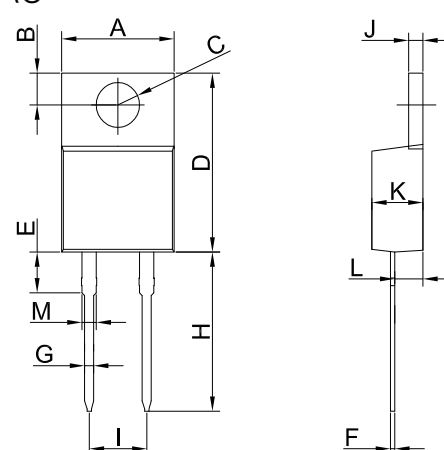
热特性 Thermal characteristics(T_C=25°C)

项目 Parameter	符合 Symbol	数值 Value	单位 Unit
热阻 Thermal resistance from junction to case	R _{th(j-c)}	0.48	°C/W

典型特征曲线图 Typical Characteristic Curve



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

TO-220AC		Dim	Min	Typ	Max
		A	9.80	10.10	10.40
		B	2.60	2.74	2.90
		C	3.69	3.84	3.99
		D	14.95	15.25	15.55
		E	3.50	3.80	4.10
		F	0.28	0.38	0.48
		G	0.60	0.80	1.00
		H	13.30	13.60	13.90
		I	4.88	5.08	5.28
		J	1.17	1.27	1.37
		K	4.30	4.50	4.70
		L	2.30	2.50	2.70
		M	1.10	1.30	1.50
		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)
WDSC20065000P	DSC20065	TO-220AC	1.9	管装 Tube	50	1000	5000

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