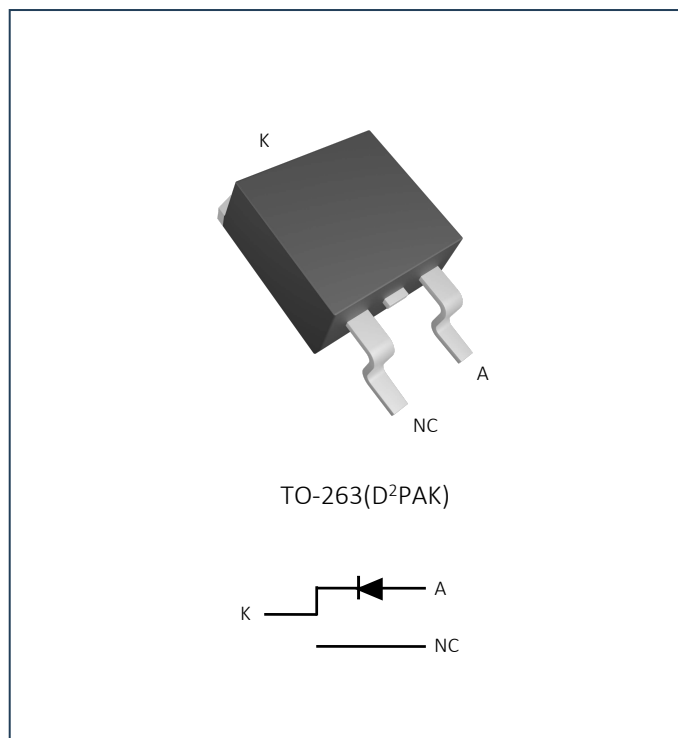


DSCN15065D

碳化硅肖特基二极管

Silicon Carbide Schottky Diode

封装外形 Package



主要参数 Device summary

Symbol	Value
$I_{F(AV)}$	15A@160°C
V_{RRM}	650V
$V_{F(typ)}$	1.39V@15A 175°C
$I_{R(typ)}$	0.018mA@650V 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	VRRM	650	V
正向电流 forward current	IF(AV)	Tc=25 °C 63	A
		Tc=160 °C 15	
浪涌电流 Non-repetitive single pulse surge current t=10ms	IFSM	130	A
功率耗散 Power Dissipation	Ptot	Tc=110 °C 101	W
结温 Junction temperature	Tj	-55~+175	°C
存储温度 Storage temperature	TSTG	-55~+175	°C

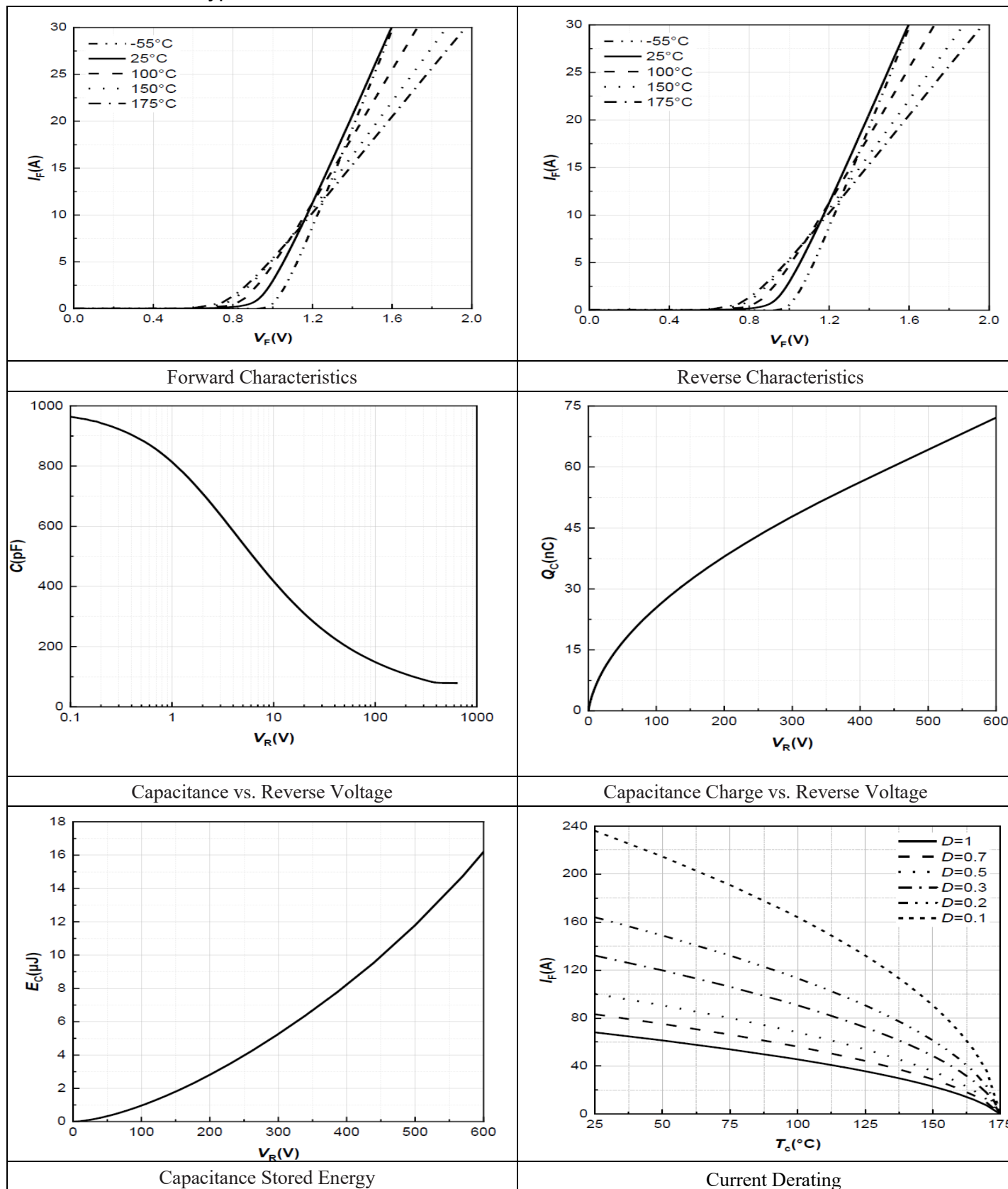
电特性 Electrical characteristics(Tc=25°C)

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 VRRM	IR=0.05mA		650	-	-	V
反向漏电流 IR	Tj=25°C	VR=650V	-	0.001	0.05	mA
	Tj=175°C		-	0.018	0.2	
正向电压 VF	Tj=25°C	IF=15A	-	1.28	1.45	V
	Tj=175°C		-	1.39	1.70	
总电容电荷量 QC	Tj=25°C	VR=400V QC= ∫ 0VRC(V)dVp	-	56	-	nC
总电容量 C	Tj=25°C	VR=1V, f=1MHZ		826		pF
		VR=300V, f=1MHZ		91		
		VR=600V, f=1MHZ		79		
电容储存能量 EC		VR=400V		8.5		μJ

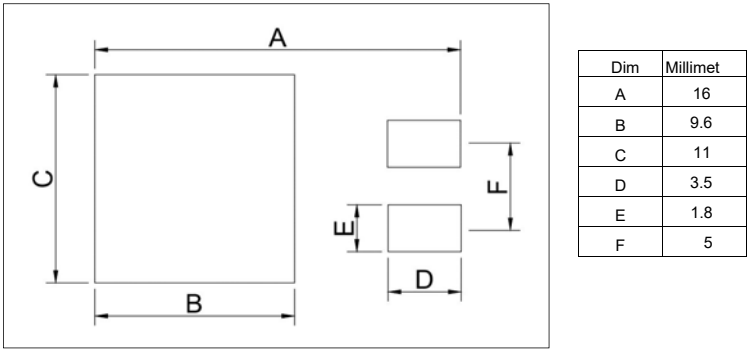
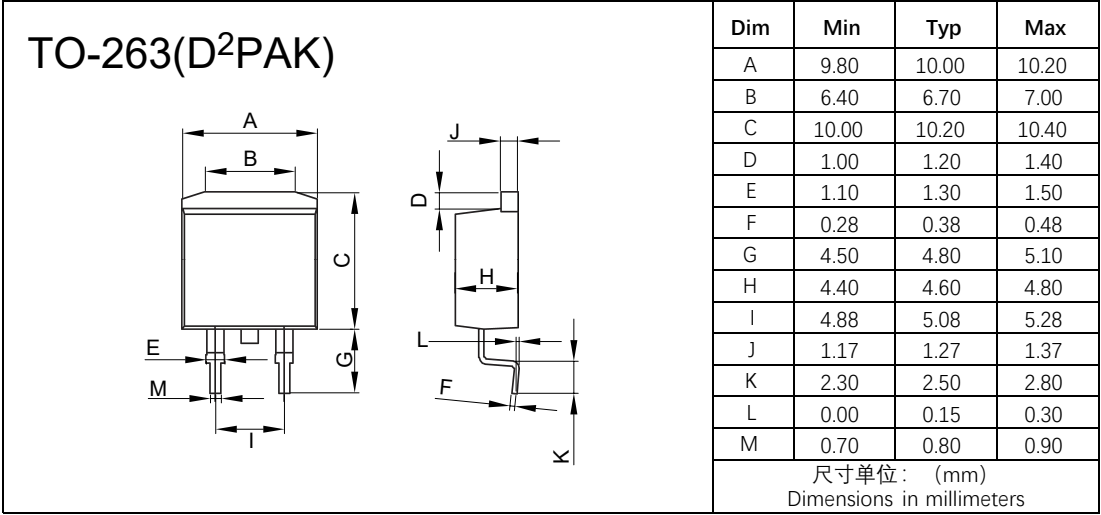
热特性 Thermal characteristics(Tc=25°C)

项目 Parameter	符合 Symbol	数值 Value	单位 Unit
热阻 Thermal resistance from junction to case	Rth(j-c)	0.64	°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



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)
WDSCN15065D000R	DSCN15065D	TO-263(D ² PAK)	1.7	盘装 Reel	800	800	8000

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