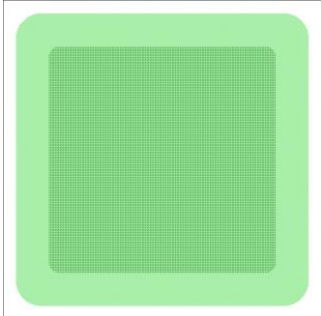


SiC Silicon-Carbide

1200V 20A Schottky Diode

Bonding Pad Information		Chip Information	
	Die Size (With Scribe Line)		3,180μm x 3,180μm
	Anode Pad Size		2,630μm x 2,630μm
	Scribe Line Size		100μm
	Wafer Size		4inchs
	Wafer Thickness		160μm
	Gross Die		621ea
	Metallization	Front Side	Al/Cu : 4.0μm
		Back Side	Ti/Ni/Ag : 2.0μm

Maximum Ratings (T_c=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	1200	V
Surge Peak Reverse Voltage	V _{RSM}	1200	V
DC Current @ T _J =150°C	I _F	20	A
Operating Junction and Storage Temperature Range	T _J	-55 to 175	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
DC Blocking Voltage	V _R	I _R =100uA, T _J =25°C	1200	-	-	V
Forward Voltage	V _F	I _F =20A, T _J =25°C	-	1.4	1.8	V
		I _F =20A, T _J =150°C	-	1.8	2.2	
		I _F =20A, T _J =175°C	-	2.0	2.4	
Reverse Current	I _R	V _R =1200V, T _J =25°C	-	5	120	μA
		V _R =1200V, T _J =150°C	-	30	250	
		V _R =1200V, T _J =175°C	-	60	500	
Total Capacitive Charge	Q _C	V _R =800V, T _J =25°C $Q_C = \int_0^{V_R} C(V) dV$	-	92	-	nC
Total Capacitance	C _j	V _R =800V, f=1MHz	-	73	-	pF