

**Ultra low losses**

Passivation: Silicon Oxide

$V_{RRM} = 1200V$

$I_F = 100A$

Die Size: 8.0 x 8.0mm

Maximum rated values:

Parameter	Symbol	Min	Max	Unit
Repetitive peak reverse voltage	$V_{RRM}$	-	1200	V
Working Peak Reverse Voltage	$V_{RWM}$	-	1200	V
DC Blocking Voltage	$V_R$	-	1200	V
Continuous forward current	$I_F$	-	100	A
Repetitive peak forward current* (Square Wave, 20 kHz)	$I_{FRM}$	-	200	A
Nonrepetitive Peak Surge Current (Halfwave, 1 Phase, 60 Hz)	$I_{FSM}$	-	tbd	A
Avalanche Energy	$E_{AVL}$	-	tbd	mj
Junction temperature	$T_J$	-	150	°C
Operating and Storage Temperature	$T_{STG}, T_J$		-65 to 175	°C

\*- Limited by  $T_{vj}$  max

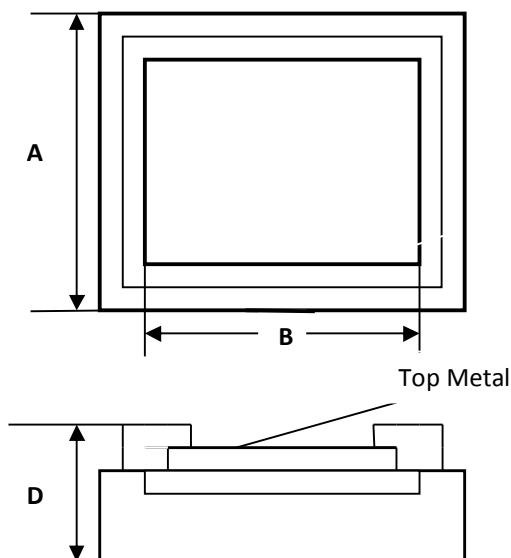
Diode Characteristics values:

Parameter	Symbol	Conditions	Min	Typ	Max	Unit	
Continuous forward voltage	$V_F$	$I_F=100A, T_{vj}=25^{\circ}C$	-	1.9	2.1	V	
Continuous forward voltage	$V_F$	$I_F=100A, T_{vj}=150^{\circ}C$	-	1.85	2.0	V	
Continuous reverse current	$I_R$	$V_R=1200V$	$T_{vj}=25^{\circ}C$	-	10	40	$\mu A$
			$T_{vj}=125^{\circ}C$	-	1.5	2.0	mA
Peak reverse recovery current	$I_{RRM}$	$I_F=100A, V_R=700V, dl_F/dt=200A/\mu S$	-	tbd		A	
Recovered charge	$Q_{RR}$		-	tbd		$\mu C$	
Reverse Recovery Time	$t_{rr}$		-	tbd		nS	
	$t_a$		-	tbd			
	$t_b$	-	tbd				
Reverse Recovery Time	$t_{rr}$	$I_F=1A, V_R=30V, dl_F/dt=200A/\mu S$	-	75	90	nS	

Mechanical properties:

Top metal: **Al-Ti** – for Wire Bonding

Backside metal: **Ti-Ni-Ag** – for Soldering



DIM	ITEM	$\mu m$
$A_x$ $A_y$	Die Size	8000 8000
D	Thickness	350 max
Scribe Line Width		60