

Ultra low losses

Passivation: Silicon Oxide

$V_{RRM} = 1200V$

$I_F = 15A$

Die Size: 3.5 x 3.5mm

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	-	15	A
Repetitive peak forward current* (Square Wave, 20 kHz)	I_{FRM}	-	30	A
Nonrepetitive Peak Surge Current (Halfwave, 1 Phase, 60 Hz)	I_{FSM}	-	200	A
Maximum Power Dissipation	P_D	-	100	W
Avalanche Energy	E_{AVL}	-		mj
Junction temperature	T_j	-	175	°C
Operating and Storage Temperature	T_{STG}, T_J		-65 to 175	°C

*- Limited by T_{vj} max

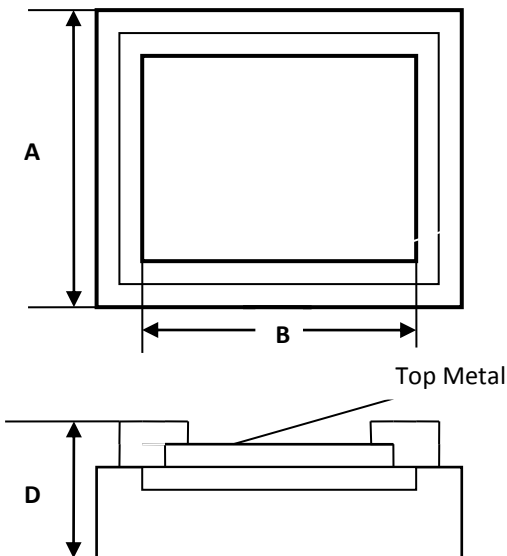
Diode Characteristics values:

Parameter	Symbol	Conditions	min	typ	max	Unit	
Continuous forward voltage	V_F	$I_F=15A, T_{vj}=25^{\circ}C$	-	2.6	3.2	V	
Continuous forward voltage	V_F	$I_F=15A, T_{vj}=150^{\circ}C$	-	2.3	2.6	V	
Continuous reverse current	I_R	$V_R=1200V$	$T_{vj}=25^{\circ}C$	-	10	20	μA
			$T_{vj}=150^{\circ}C$	-	0.25	0.5	mA
Peak reverse recovery current	I_{RRM}	$I_F=15A, V_R=30V, dl_F/dt=100A/\mu S$	-	tbd		A	
Recovered charge	Q_{RR}		-	150		μC	
Reverse Recovery Time	t_{rr}		-		75	nS	
	t_a			35			
	t_b		29				
Reverse Recovery Time	t_{rr}	$I_F=1A, V_R=30V, dl_F/dt=100A/\mu S$	-		65	nS	
Thermal resistance for TO-220AC-2L	$R_{\theta jc}$		-		1.5	$^{\circ}C/W$	

Mechanical properties:

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

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



DIM	ITEM	μm
A_x A_y	Die Size	3500 3500
D	Thickness	350 max
Scribe Line Width		60