

**VSP-MIKRON****Soft Fast Recovery Diode** $V_{RRM} = 1200V$ $I_F = 50A$ **KD50120F**

Die Size:

8.7 x 5.0mm

Preliminary Specification, Rev 2, May 2013

Ultra low losses

Passivation: Silicon Oxide

Maximum rated values:

Parameter	Symbol	min	max	Unit
Repetitive peak reverse voltage	V_{RRM}	-	1200	V
Continuous forward current	I_F	-	50	A
Repetitive peak forward current*	I_{FRM}	-	100	A
Junction temperature	T_{vj}	-	150	°C

* - Limited by $T_{vj\max}$ Diode Characteristics values:

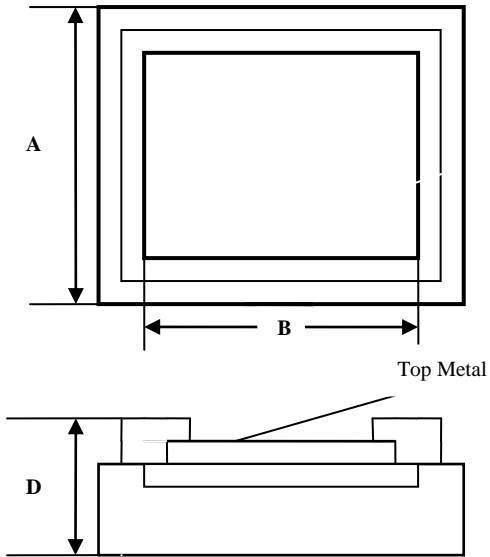
Parameter	Symbol	Conditions	min	typ	max	Unit
Continuous forward voltage	V_F	$I_F=50A, T_{vj}= 25^\circ C$		2.3		V
Continuous reverse current	I_R	$V_R=1200V, T_{vj}= 25^\circ C$			100	uA
		$T_{vj}= 125^\circ C$		2.0		mA
Peak reverse recovery current	I_{RRM}	$I_F=50A, V_R=700V,$ $dI_F/dt=200A/uS,$ $T_{vj}= 25^\circ C$		**		A
Recovered charge	Q_{rr}			**		μC
Reverse Recovery Time	t_{rr}				**	
Reverse Recovery Time	t_{rr}	$I_F=1A, V_R=30V,$ $dI_F/dt=200A/uS.$		65	70	nS

**- To be determined

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	8700 5000
D	Thickness	350 max
Scribe Line Width		60