

**VSP-MIKRON****Soft Fast Recovery Diode** $V_{RRM} = 4500V$  $I_F = 75A$ **KD75450F**

Die Size:

10.8 x 8.3mm

Preliminary Specification, Rev 2, May 2012

**Ultra low losses***Passivation:* Silicon Oxide plus PolyimideMaximum rated values:

Parameter	Symbol	min	max	Unit
Repetitive peak reverse voltage	$V_{RRM}$	-	4500	V
Continuous forward current	$I_F$	-	75	A
Repetitive peak forward current*	$I_{FRM}$	-	150	A
Junction temperature	$T_{vj}$	-	150	°C

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

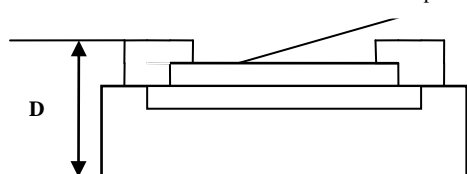
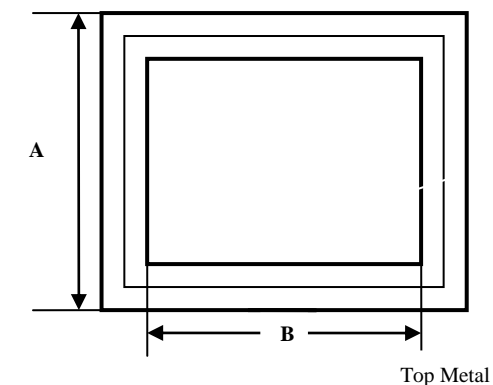
Parameter	Symbol	Conditions	min	typ	max	Unit
Continuous forward voltage	$V_F$	$I_F=100A, T_{vj}= 25^\circ C$		2.6		V
Continuous reverse current	$I_R$	$V_R=4500V$ $T_{vj}= 25^\circ C$			100	uA
		$T_{vj}= 125^\circ C$		10.0		mA
Peak reverse recovery current	$I_{RRM}$	$I_F=40A, V_R=2000V,$ $dI_F/dt=100A/uS,$ $T_{vj}= 25^\circ C$		**		A
Recovered charge	$Q_{rr}$			**		µC
Reverse Recovery Time	$t_{rr}$				600	700
Reverse Recovery Time	$t_{rr}$	$I_F=1A, V_R=30V,$ $dI_F/dt=200A/uS.$		**		nS

\*\*- To be determined

Mechanical properties:

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

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



DIM	ITEM	µm
A <sub>x</sub> A <sub>y</sub>	Die Size	10800 8300
D	Thickness	350 max
Scribe Line Width		60