



VSP-MIKRON



$V_{RRM}=2500V$

$I_F = 100A$

Diode-Die

KD100250F

Die Size-8.3 x 10.8 0mm.

Passivation : Silicon Oxide

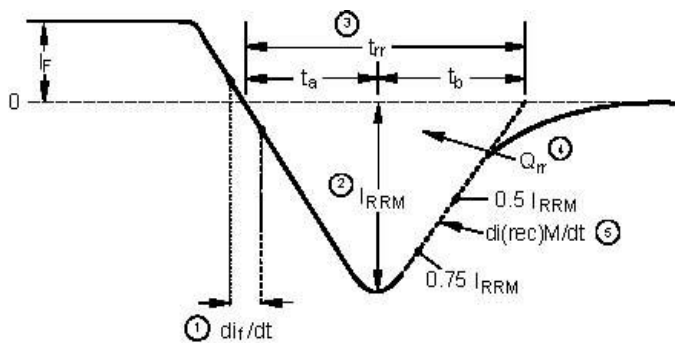
Maximum rated values

Parameter	Symbol	Unit	min	max
Repetitive peak reverse voltage	V_{RRM}	V	-	2500
Continuous forward current	I_F	A	-	100
Repetitive peak forward current*	I_{FRM}	A	-	200
Junction temperature	T_{vj}	°C	-	150

*Limited by $T_{vj\ max}$

Diode Characteristics values

Parameter	Symbol	Conditions	min	typ	max	Unit
Continuous forward voltage	V_F	$I_F=100A, T_{vj}= 25^\circ C$		2.4	2.45	V
Continuous reverse current	I_R	$V_R=1200V \begin{matrix} T_{vj}= 25^\circ C \\ T_{vj}= 125^\circ C \end{matrix}$		5 2.0	100 2.5	μA mA
Peak reverse recovery current	I_{RRM}	$I_F=50A, V_R=700V,$ $di_F/dt=200A/\mu S,$ $T_{vj}= 25^\circ C$		уточняется		A
Recovered charge	Q_{rr}		уточняется		μC	
Reverse Recovery Time	t_{rr}		уточняется		nS	
Reverse Recovery Time	t_{rr}	$I_F=1A, V_R=30V,$ $di_F/dt=200A/\mu S.$		100	150	nS



1. di_F/dt - Rate of change of current through zero crossing

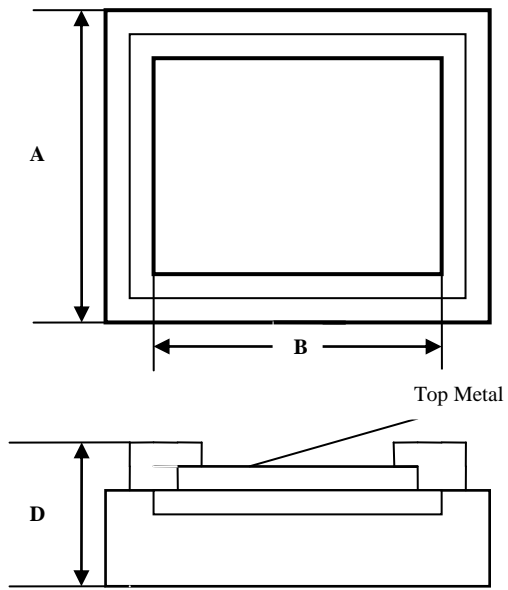
2. I_{RRM} - Peak reverse recovery current

3. t_{rr} - Reverse recovery time measured from zero crossing point of negative going I_F to point where a line passing through $0.75 I_{RRM}$ and $0.50 I_{RRM}$ extrapolated to zero current

4. Q_{rr} - Area under curve defined by t_{rr} and I_{RRM}

$$Q_{rr} = \frac{t_{rr} \times I_{RRM}}{2}$$

5. $di_{(rec)M}/dt$ - Peak rate of change of current during t_b portion of t_{rr}



DIM	ITEM	μm
A_x A_y	Die Size	10800 8300
D	Thickness	560max.
Scribe line Width		60

*Top metal: **Al** – for Wire Bonding.*

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

www.vsp-mikron.com