



VSP-MIKRON



FRED

$V_{RRM} = 600V$

$I_F = 25A$

**KD2560 UF**

Die Size:

3.140 x 4.920 mm

Preliminary Specification, Rev 3, May 2013

**Ultra low losses**

Passivation: Silicon Oxide

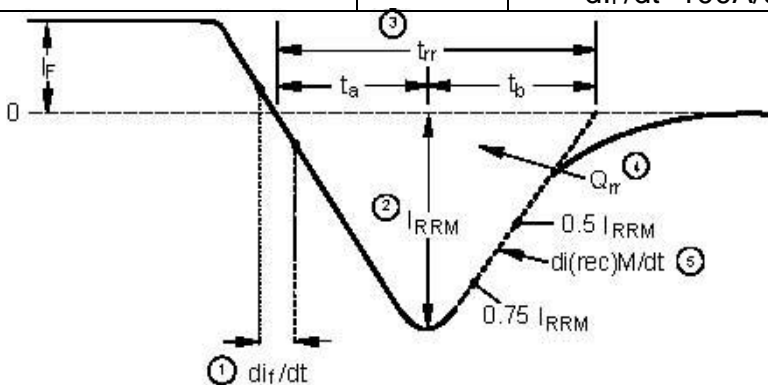
Maximum rated values:

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

Parameter	Symbol	min	max	Unit
Repetitive peak reverse voltage	$V_{RRM}$	-	600	V
Continuous forward current	$I_F$	-	25	A
Repetitive peak forward current*	$I_{FRM}$	-	50	A
Nonrepetitive peak surge current (Halfwave, 1 Phase, 50 Hz)	$I_{FSM}$	-	400	A
Junction temperature	$T_{vj}$	-	150	°C

Diode Characteristics values:

Parameter	Symbol	Conditions	min	typ	max	Unit
Continuous forward voltage	$V_F$	$I_F = 25A, T_{vj} = 25^\circ C$		1.2	1.35	V
Continuous reverse current	$I_R$	$V_R = 600V$ $T_{vj} = 25^\circ C$ $T_{vj} = 125^\circ C$		1	10	$\mu A$ mA
Reverse Recovery Time	$t_{rr}$	$I_F = 1A, V_R = 30V,$ $di_F/dt = 100A/\mu S.$		50	70	nS



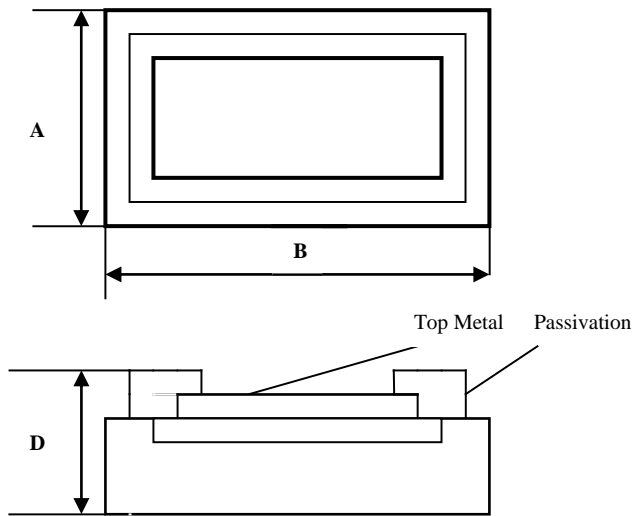
- $di_F/dt$  - Rate of change of current through zero crossing
- $I_{RRM}$  - Peak reverse recovery current
- $t_{rr}$  - Reverse recovery time measured from zero crossing point of negative going  $I_F$  to point where a line passing through  $0.75 I_{RRM}$  and  $0.50 I_{RRM}$  extrapolated to zero current
- $Q_{rr}$  - Area under curve defined by  $t_{rr}$  and  $I_{RRM}$   

$$Q_{rr} = \frac{t_{rr} \times I_{RRM}}{2}$$
- $di_{(rec)M}/dt$  - Peak rate of change of current during  $t_b$  portion of  $t_{rr}$

Mechanical properties:

*Top metal: **Al-Ti - Ag***

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



DIM	ITEM	µm
A	Die Size	3140
B		4920
D	Thickness	350max.
Scribe line Width		60

[www.vsp-mikron.com](http://www.vsp-mikron.com)

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