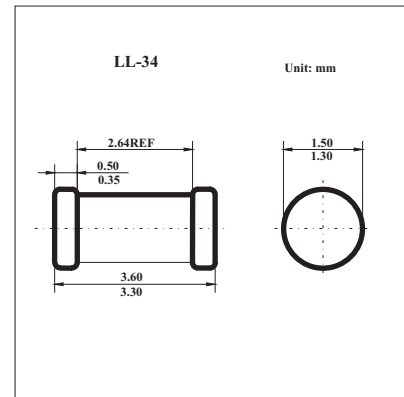


## Schottky Barrier Diode

### KAS85(BAS85)

#### ■ Features

- Low forward voltage
- High breakdown voltage
- Guard ring protected



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
continuous reverse voltage	$V_R$	30	V
continuous forward current	$I_F$	200	mA
average forward current ( $V_{RWM} = 25\text{ V}$ ; $a = 1.57$ ; $\delta = 0.5$ )	$I_{F(AV)}$	200	mA
repetitive peak forward current ( $t_p \leq 1\text{ s}$ ; $\delta \leq 0.5$ )	$I_{FRM}$	300	mA
non-repetitive peak forward current ( $t_p = 10\text{ ms}$ )	$I_{FSM}$	5	A
thermal resistance from junction to ambient	$R_{th\ j-a}$	320	K/W
operating ambient temperature	$T_{amb}$	-65 to +125	$^\circ\text{C}$
junction temperature	$T_j$	125	$^\circ\text{C}$
storage temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Max	Unit
forward voltage	$V_F$	$I_F = 0.1\text{ mA}$	240	mV
		$I_F = 1\text{ mA}$	320	
		$I_F = 10\text{ mA}$	400	
		$I_F = 30\text{ mA}$	500	
		$I_F = 100\text{ mA}$	800	
reverse current	$I_R$	$V_R = 25\text{ V}^*$	2.3	$\mu\text{ A}$
diode capacitance	$C_d$	$f = 1\text{ MHz}$ ; $V_R = 1\text{ V}$	10	pF

\* Pulsed test:  $t_p = 300\ \mu\text{s}$ ;  $\delta = 0.02$ .