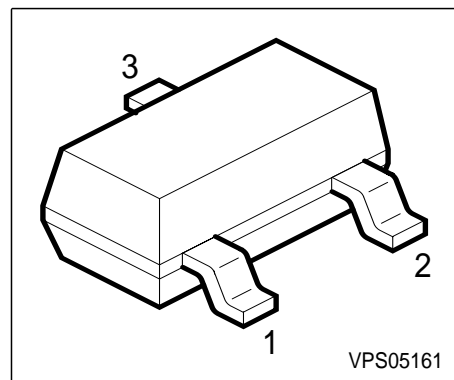


### Silicon Schottky Diode

#### Preliminary data

- Rectifier Schottky diode for modem applications
- High reverse voltage
- For power supply
- For clamping and protection in all high voltage applications



**ESD:** Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Ordering Code	Pin Configuration			Package
BAT 240A	4Ms	Q62702-A1234	1=C1/A2	2 = C2	3 = A1	SOT-23

#### Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	240	V
Peak reverse voltage	$V_{RM}$	250	V
Forward current	$I_F$	400	mA
Surge forward current ( $t \leq 10\text{ms}$ )	$I_{FSM}$	1	A
Total power dissipation, $T_S = 28^\circ\text{C}$	$P_{tot}$	400	mW
Junction temperature	$T_j$	80	$^\circ\text{C}$
Storage temperature	$T_{stg}$	- 55 ...+150	

#### Maximum Ratings

Junction - ambient <sup>1)</sup>	$R_{thJA}$	$\leq 465$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 305$	

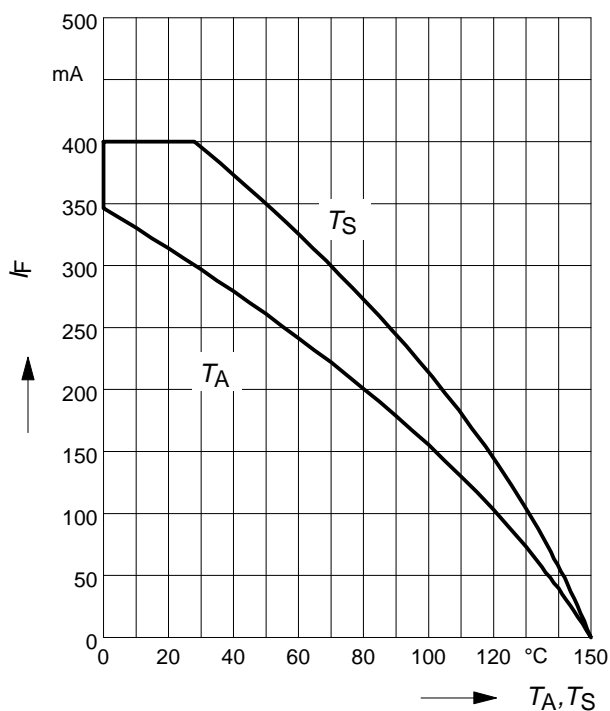
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm<sup>2</sup> Cu

**Electrical Characteristics** at  $T_A = 25\text{ °C}$ , unless otherwise specified.

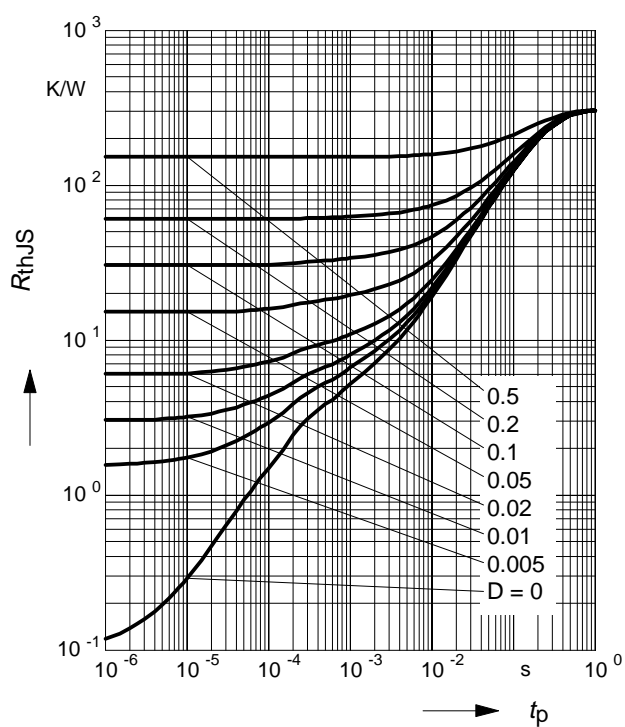
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Breakdown voltage $I_{(BR)} = 500\text{ }\mu\text{A}$	$V_{(BR)}$	240	-	-	V
Reverse current $V_R = 200\text{ V}$ $V_R = 240$	$I_R$	- -	5 -	- 50	$\mu\text{A}$
Forward voltage $I_F = 10\text{ mA}$ $I_F = 20\text{ mA}$ $I_F = 50\text{ mA}$	$V_F$	- - -	0.325 0.37 0.47	- - -	V
AC characteristics					
Diode capacitance $V_R = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	-	11.5	-	pF

**Forward current**  $I_F = f(T_A^*; T_S)$

\* Package mounted on epoxy



**Permissible Pulse Load**  $R_{thJS} = f(t_p)$



**Permissible Pulse Load**

$I_{Fmax} / I_{FDC} = f(t_p)$

