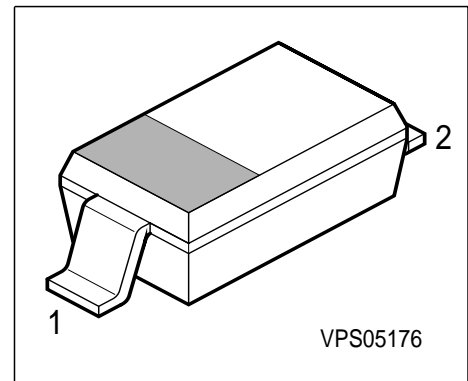


### Silicon Schottky Diode

- Rectifier Schottky diode with extreme low  $V_F$  drop for mobile communication
- For power supply
- For clamping and protection in low voltage application
- For detection and step-up-conversion



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

Type	Marking	Ordering Code	Pin Configuration		Package
BAT 60A	white/3	Q62702-A1188	1 = C	2 = A	SOD-323

#### Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	10	V
Forward current	$I_F$	3	A
Surge forward current ( $t < 100\mu s$ )	$I_{FSM}$	5	mA
Total power dissipation, $T_S = 28\text{ }^\circ\text{C}$	$P_{tot}$	1350	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	- 55 ...+150	

#### Maximum Ratings

Junction - ambient <sup>1)</sup>	$R_{thJA}$	$\leq 160$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 90$	

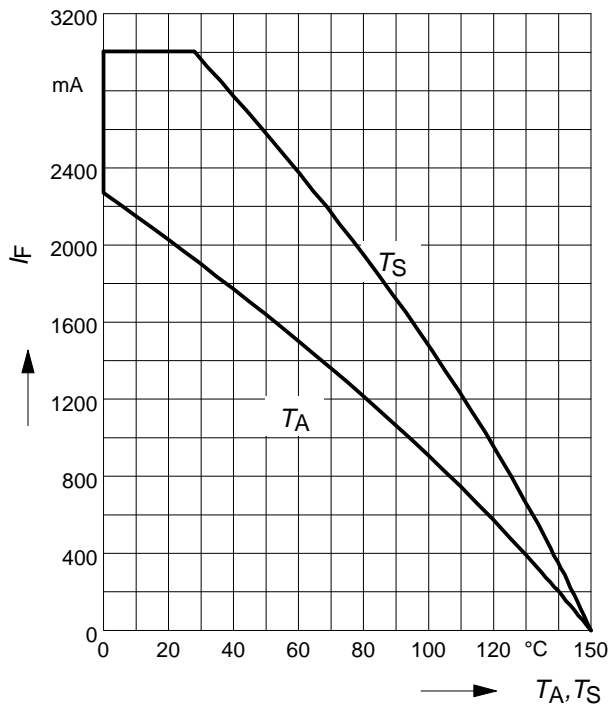
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm<sup>2</sup> Cu

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Reverse current $V_R = 5\text{ V}$ $V_R = 8\text{ V}$	$I_R$	- -	0.3 0.45	- -	mA
Reverse current $V_R = 8\text{ V}, T_A = 80\text{ °C}$	$I_R$	-	18	-	$\mu\text{A}$
Forward voltage $I_F = 10\text{ mA}$ $I_F = 100\text{ mA}$ $I_F = 1000\text{ mA}$	$V_F$	- - -	0.12 0.2 0.3	- - -	V
<b>AC characteristics</b>					
Diode capacitance $V_R = 5\text{ V}, f = 1\text{ MHz}$	$C_T$	-	20	-	pF

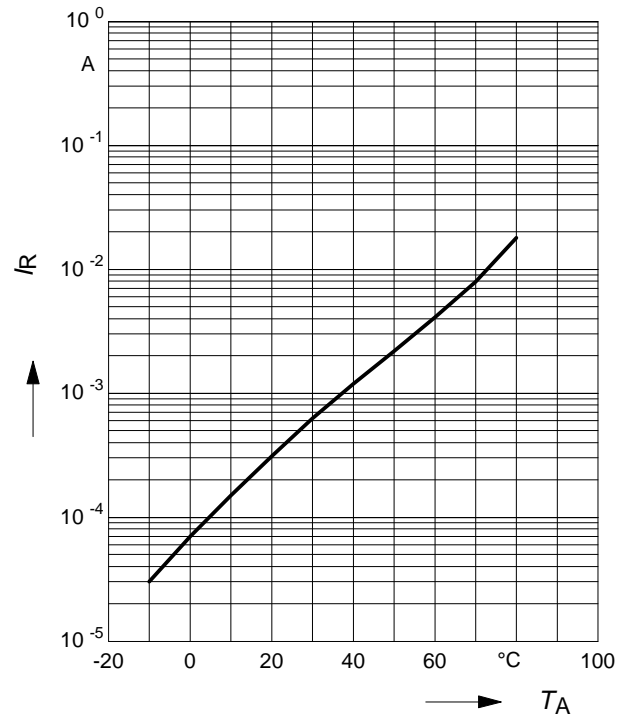
### Forward current $I_F = f(T_A^*; T_S)$

\* Package mounted on epoxy

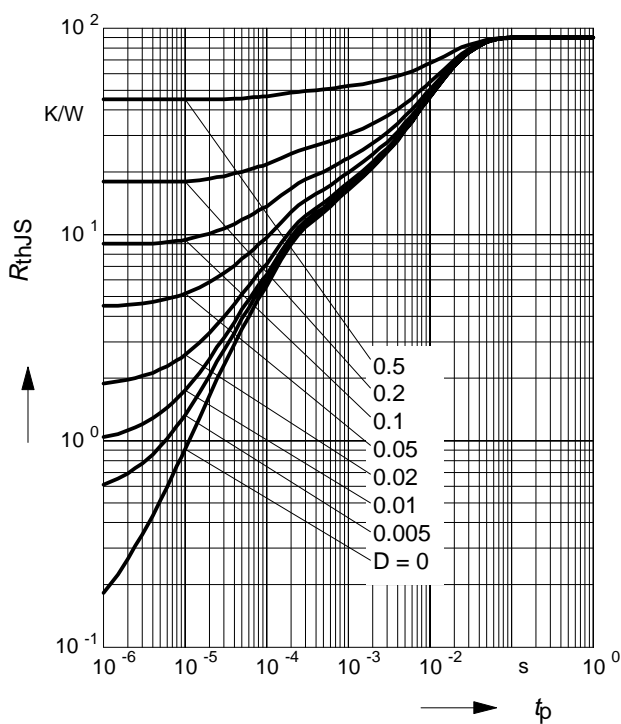


### Reverse current $I_R = f(T_A)$

$V_R = 8V$



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



### Permissible Pulse Load

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

