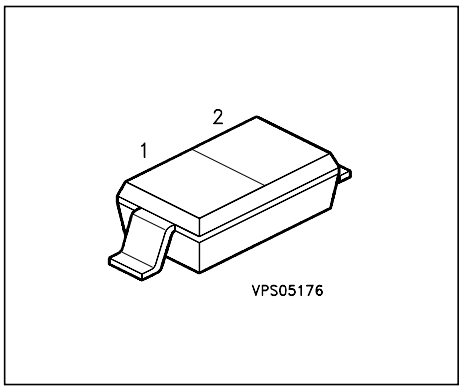
Silicon Schottky Diode

Preliminary data

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



ESD: **E**lectro**S**tatic **D**ischarge sensitive device, observe handling precautions!

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

Maximum Ratings

Parameter	Symbol	Values	Unit
Diode reverse voltage	V_R	10	V
Forward current	I_F	3	A
Surge forward current ($t \leq 10$ms)	I_{FSM}	5	
Total power dissipation T_S = 28 °C	P_{tot}	1350	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 ... + 150	

Thermal Resistance

Junction - ambient 1)	R_{thJA}	≤ 160	K/W
Junction - soldering point	R_{thJS}	≤ 90	

1) Package mounted on epoxy pcb 40mm x 40mmm x 1.5mm / 6cm^2 Cu

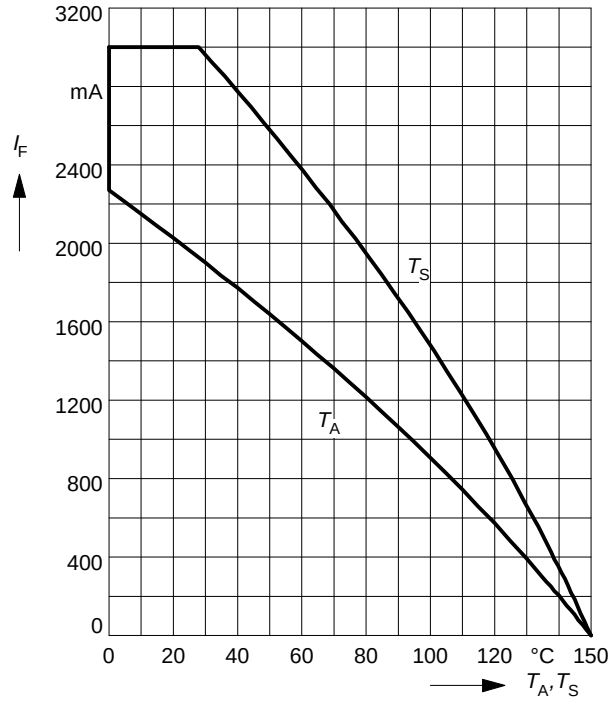
Electrical Characteristics at T_A=25°C, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current	I_R				mA
V_R = 5 V, T_A = 25 °C		-	0.3	-	
V_R = 8 V, T_A = 25 °C		-	0.45	-	
V_R = 8 V, T_A = 80 °C		-	18	-	
Forward voltage	V_F				V
I_F = 10 mA		-	0.14	-	
I_F = 100 mA		-	0.2	-	
I_F = 1000 mA		-	0.3	-	
AC Characteristics					
Diode capacitance	C_T				pF
V_R = 5 V, f = 1 MHz		-	20	-	

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

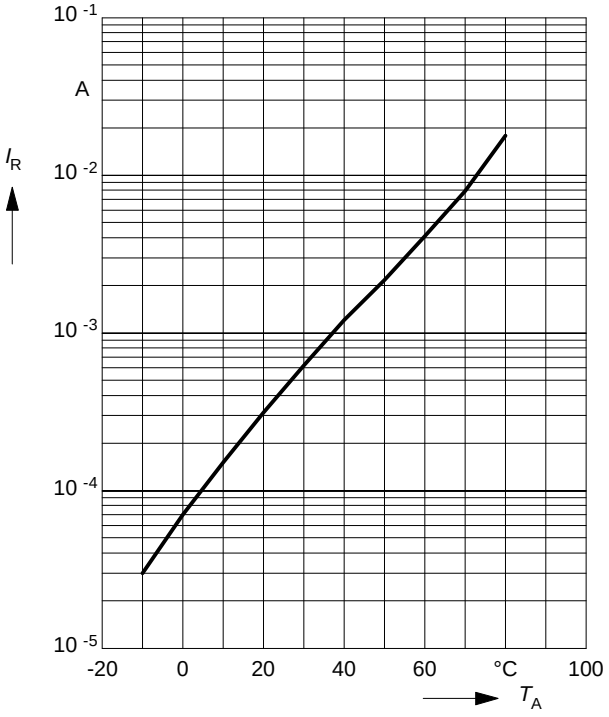
*): mounted on epoxy PCB

40mm x 40mm x 1.5mm/ 6cm^2 Cu

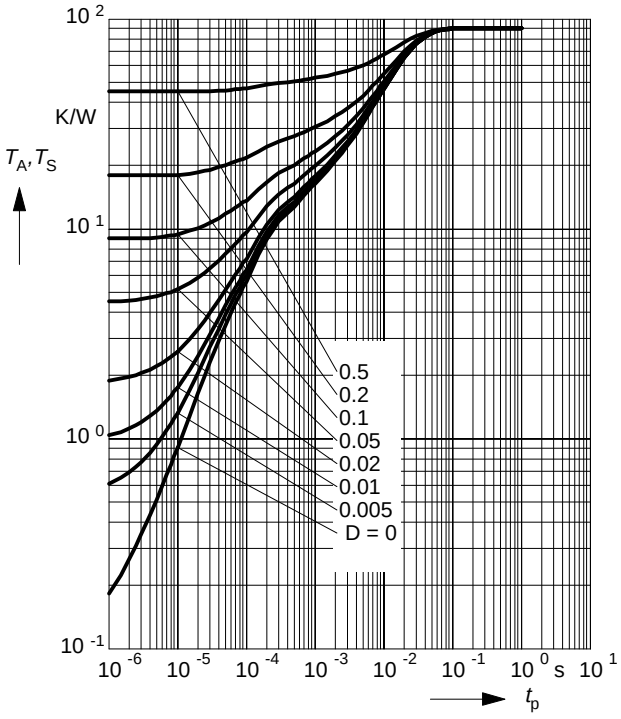


Reverse current $I_R = f(T_A)$

V_R = 8V



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



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