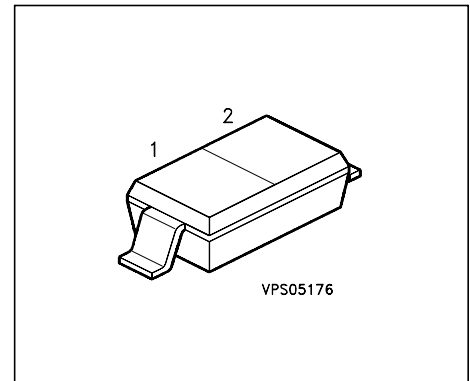


Silicon Schottky Diode

Preliminary data

- Rectifier Schottky diode for mobile communication
- Low voltage high inductance
- For power supply
- For clamping and protection in low voltage applications
- For detection and step-up-conversion



ESD: ElectroStatic Discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration			Package
BAT 60B	blue/5	Q62702-A1189	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 ($t \leq 10\text{ms}$)	I_{FSM}	5	
Total power dissipation $T_S = 28^\circ\text{C}$	P_{tot}	1350	mW
Junction temperature	T_j	150	$^\circ\text{C}$
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 40mm x 1.5mm / 6cm² Cu

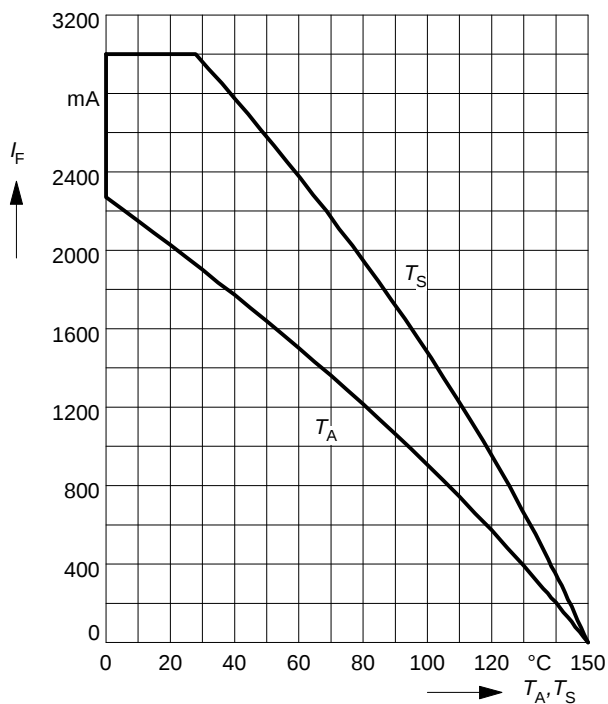
Electrical Characteristics at $T_A=25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current	I_R				μA
$V_R = 5\text{ V}, T_A = 25\text{ }^{\circ}\text{C}$		-	5	-	
$V_R = 8\text{ V}, T_A = 25\text{ }^{\circ}\text{C}$		-	10	-	
$V_R = 8\text{ V}, T_A = 80\text{ }^{\circ}\text{C}$		-	410	-	
Forward voltage	V_F				V
$I_F = 10\text{ mA}$		-	0.24	-	
$I_F = 100\text{ mA}$		-	0.3	-	
$I_F = 1000\text{ mA}$		-	0.4	-	
AC Characteristics					
Diode capacitance	C_T				pF
$V_R = 5\text{ V}, f = 1\text{ MHz}$		-	20	-	

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

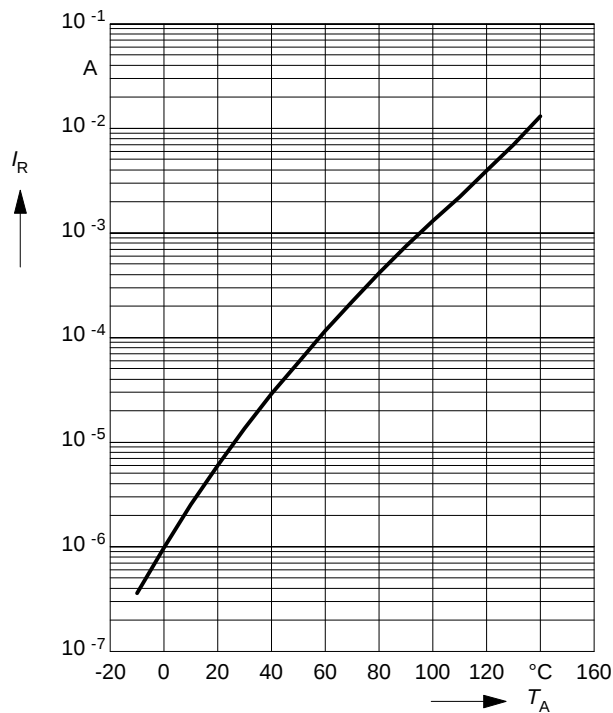
*) : mounted on epoxy PCB

40mm x 40mm x 1.5mm/ 6cm² Cu

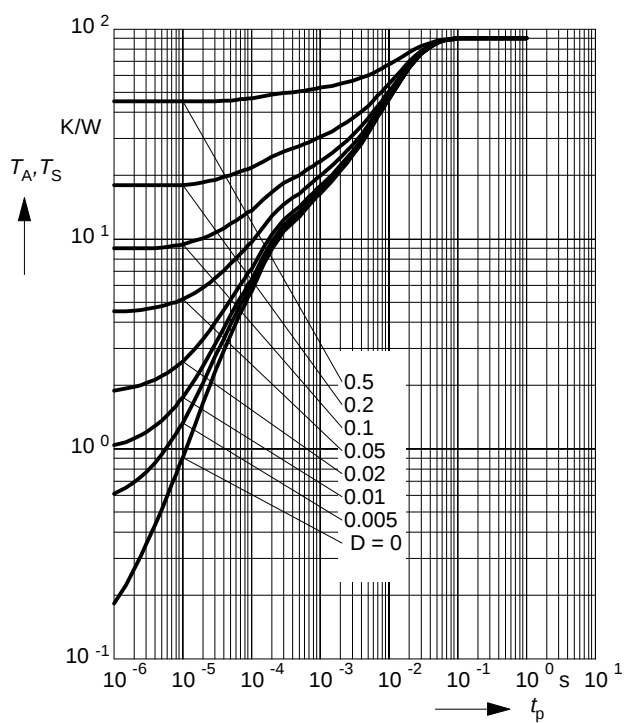


Reverse current $I_R = f(T_A)$

$V_R = 8V$



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



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

