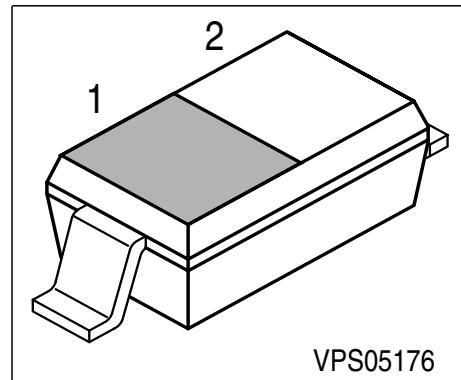


Silicon Schottky Diode

- High current rectifier Schottky diode with extreme low V_F drop
- For power supply
- For clamping and protection in low voltage applications
- For detection and step-up-conversion



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration		Package
BAT 60A	white/3	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 ($t < 10\text{ms}$)	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	

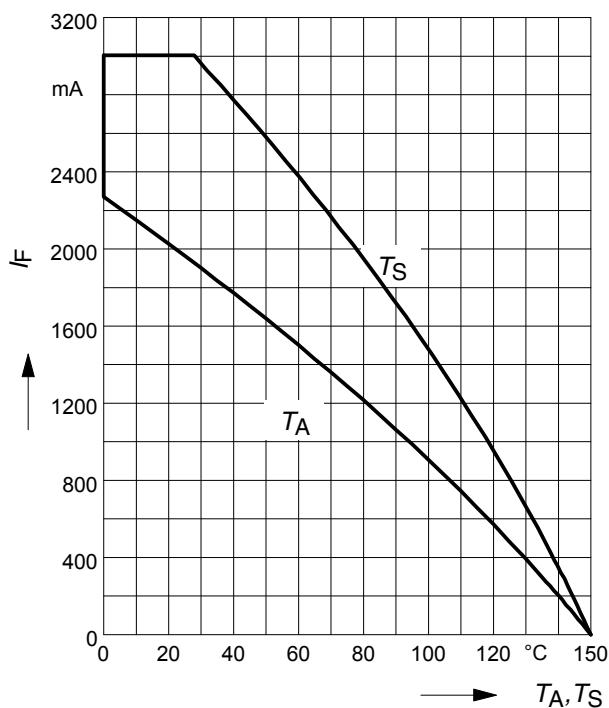
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

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

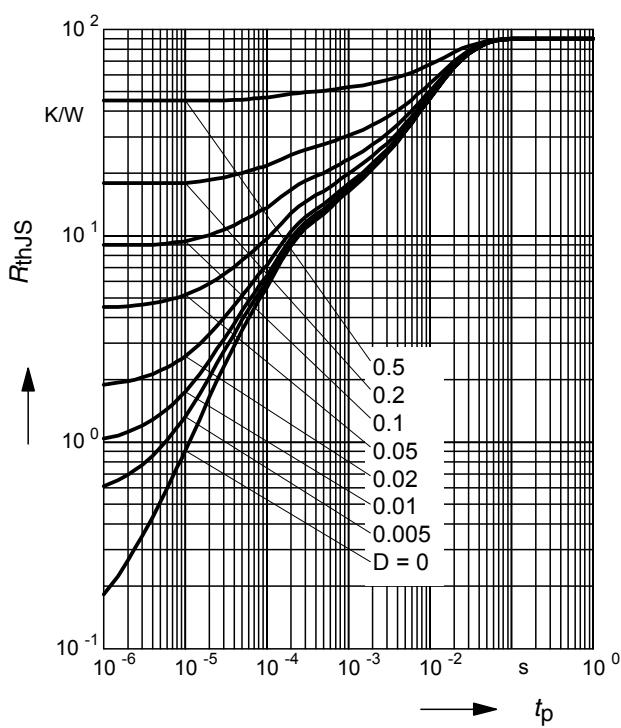
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 5 \text{ V}$	I_R	-	0.3	-	mA
$V_R = 8 \text{ V}$		-	0.6	2.6	
Reverse current $V_R = 8 \text{ V}, T_A = 80 \text{ }^\circ\text{C}$	I_R	-	18	-	
Forward voltage $I_F = 10 \text{ mA}$	V_F	0.1	0.12	0.15	V
$I_F = 100 \text{ mA}$		-	0.2	-	
$I_F = 1000 \text{ mA}$		-	0.3	-	
AC characteristics					
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

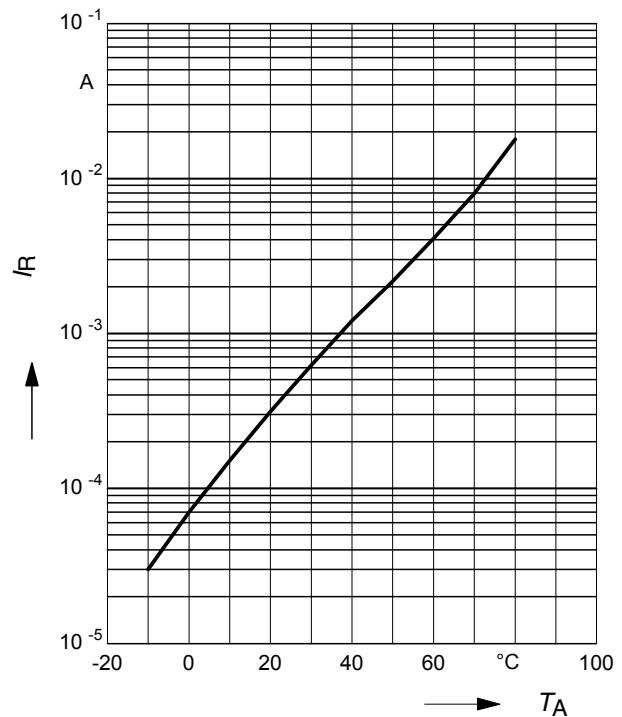


Permissible Pulse Load $R_{thJS} = f(t_p)$



Reverse current $I_R = f(T_A)$

$V_R = 8V$



Permissible Pulse Load

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

