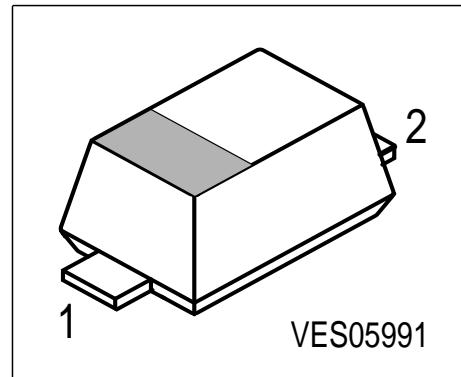


**Silicon Schottky Diode**

- Low barrier diode for detectors up to GHz frequencies



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

Type	Marking	Ordering Code	Pin Configuration		Package
BAT 62-02W	L	Q62702-A1028	1 = C	2 = A	SCD-80

**Maximum Ratings**

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	40	V
Forward current	$I_F$	40	mA
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 ... +150	

**Thermal Resistance**

Junction - ambient 1)	$R_{thJA}$	$\leq 650$	K/W
Junction - soldering point	$R_{thJS}$	$\leq 810$	

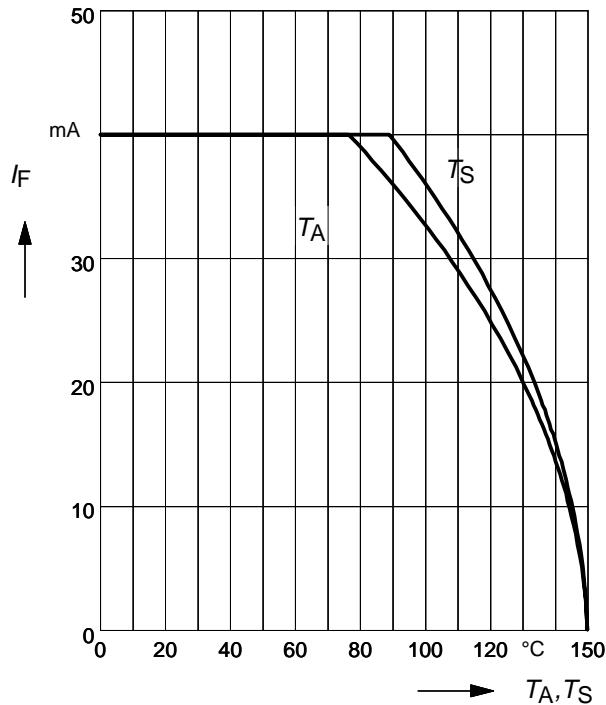
1) Package mounted on epoxy pcb 15mm x 16.7mm x 0.7mm

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

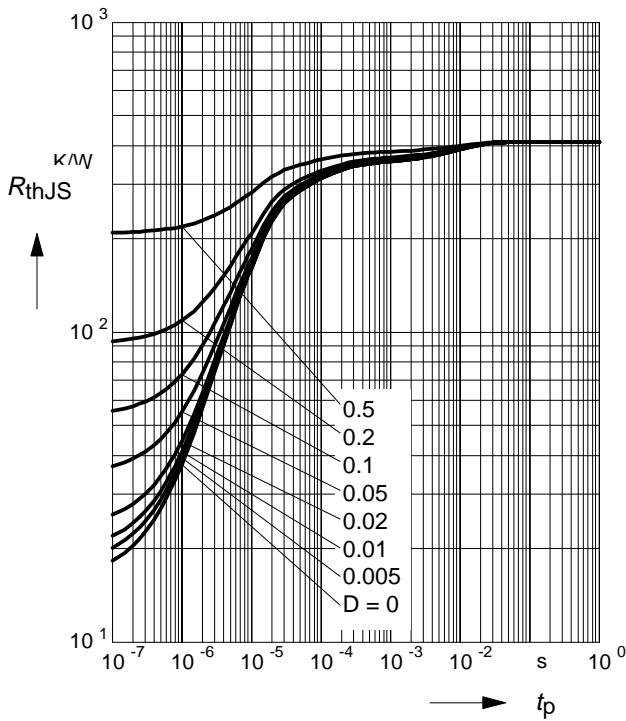
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
<b>DC characteristics</b>					
Reverse current $V_R = 40 \text{ V}$	$I_R$	-	-	10	$\mu\text{A}$
Forward voltage $I_F = 2 \text{ mA}$	$V_F$	-	0.58	1	V
<b>AC characteristics</b>					
Diode capacitance $V_R = 1 \text{ V}, f = 1 \text{ MHz}$	$C_T$	-	0.35	0.6	pF
Case capacitance $f = 1 \text{ MHz}$	$C_C$	-	0.09	-	
Differential resistance $V_R = 0, f = 10 \text{ kHz}$	$R_0$	-	225	-	$\text{k}\Omega$
Series inductance chip to ground	$L_s$	-	0.6	-	nH

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

\* Package mounted on epoxy

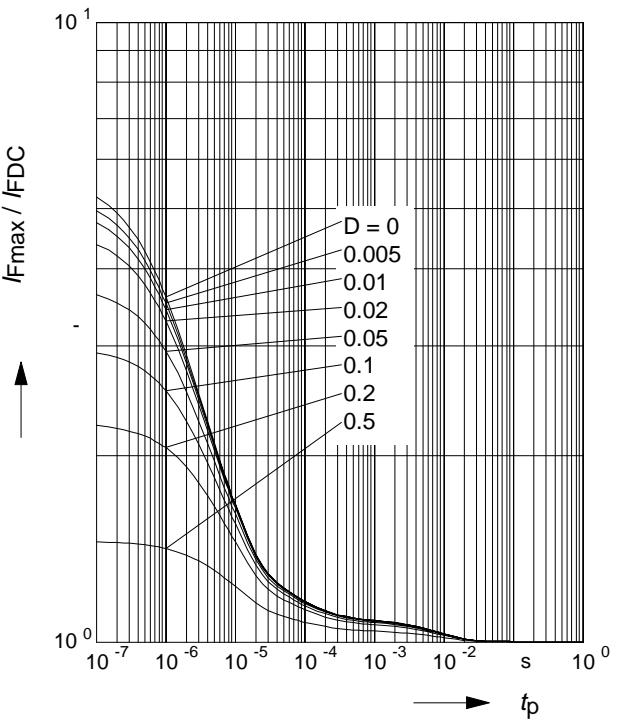


**Permissible Pulse Load**  $R_{thJS} = f(t_p)$



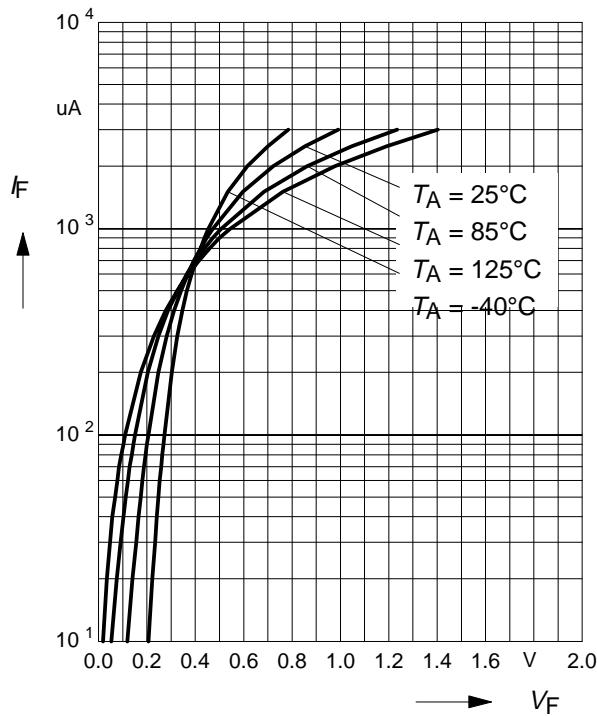
**Permissible Pulse Load**

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



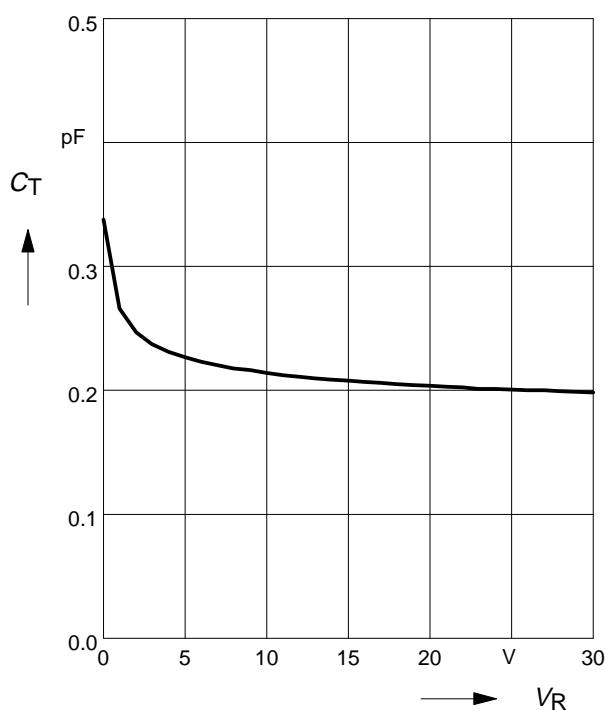
**Forward current**  $I_F = f(V_F)$

$T_A$  = parameter



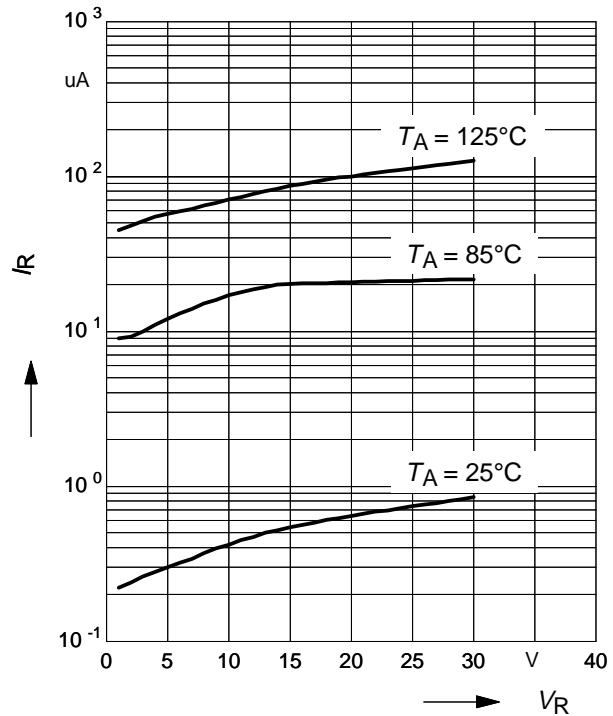
**Diode capacitance**  $C_T = f(V_R)$

$f = 1\text{MHz}$



**Leakage current**  $I_R = f(V_R)$

$T_A$  = Parameter



**Rectifier voltage**  $V_{\text{out}} = f(V_{\text{in}})$

$f = 900\text{ MHz}$

$R_L$  = parameter in  $\text{k}\Omega$

