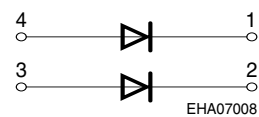
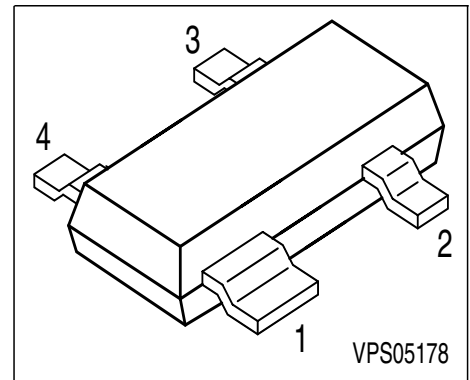


Silicon Schottky Diodes

- For low-loss, fast-recovery, meter protection, bias isolation and clamping applications
- Integrated diffused guard ring
- Low forward voltage



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration				Package
BAS 125-07	17s	1 = C1	2 = C2	3 = A2	4 = A1	SOT-143

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	25	V
Forward current	I_F	100	mA
Surge forward current ($t < 100\mu s$)	I_{FSM}	500	
Total power dissipation, $T_S = 25\text{ }^\circ\text{C}$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ... 150	

Maximum Ratings

Junction - ambient ¹⁾	R_{thJA}	≤ 450	K/W
----------------------------------	------------	------------	-----

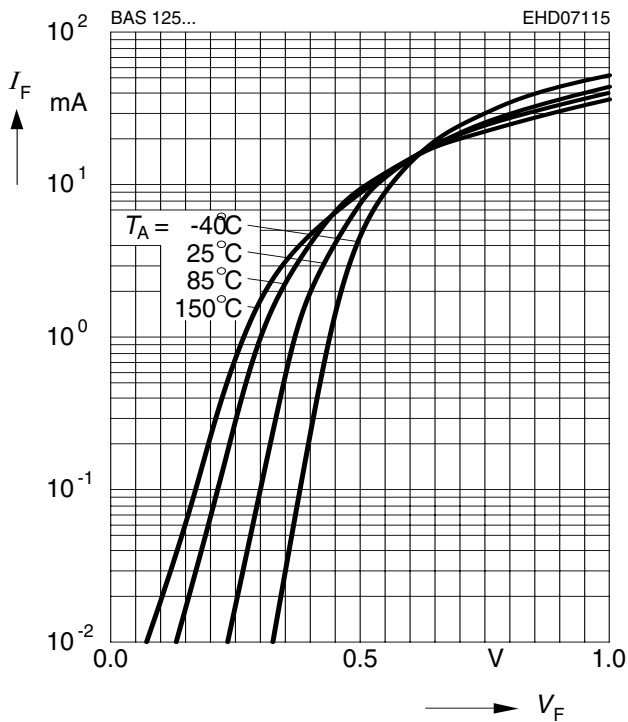
1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 20\text{ V}$ $V_R = 25\text{ V}$	I_R	- -	- -	100 150	μA
Forward voltage $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$ $I_F = 35\text{ mA}$	V_F	- - -	385 530 800	400 650 950	mV
AC characteristics					
Diode capacitance $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	-	1.1	pF
Differential forward resistance $I_F = 5\text{ mA}$, $f = 10\text{ kHz}$	r_f	-	16	-	Ω

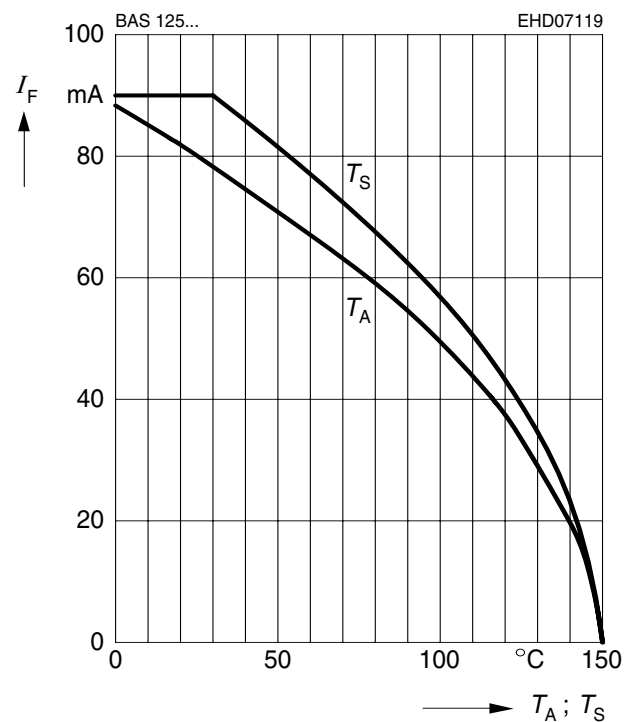
Forward current $I_F = f(V_F)$

T_A = Parameter



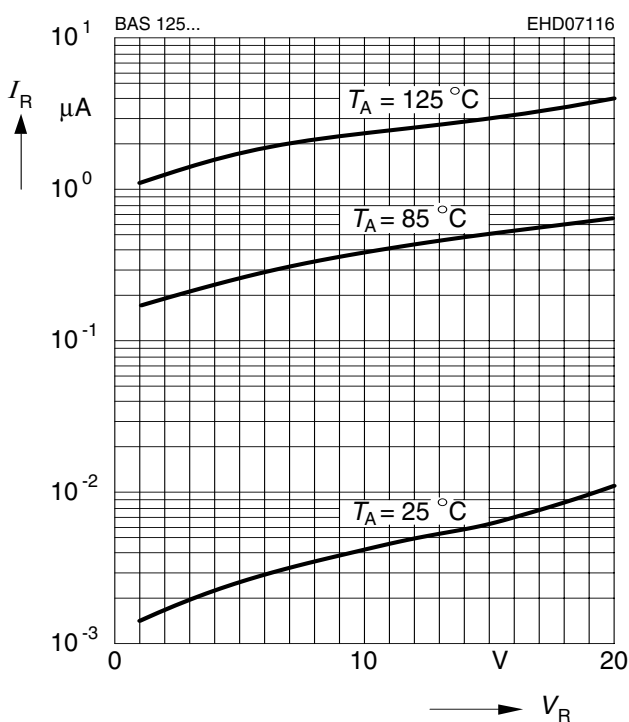
Forward current $I_F = f(T_A^*; T_S)$

* Package mounted on alumina



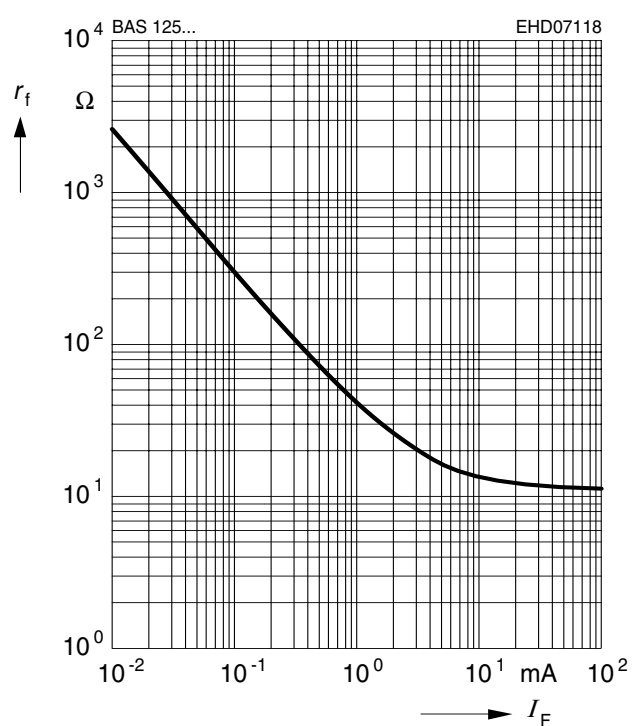
Reverse current $I_R = f(V_R)$

T_A = Parameter



Differential forward resistance $r_f = f(I_F)$

$f = 10 \text{ kHz}$



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$

