

BAS70_BAS70-04_BAS70-05_BAS70-06

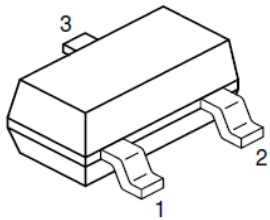
Schottky Diodes

Features

- General-purpose diode for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing
- RoHS compliant package

Packing & Order Information

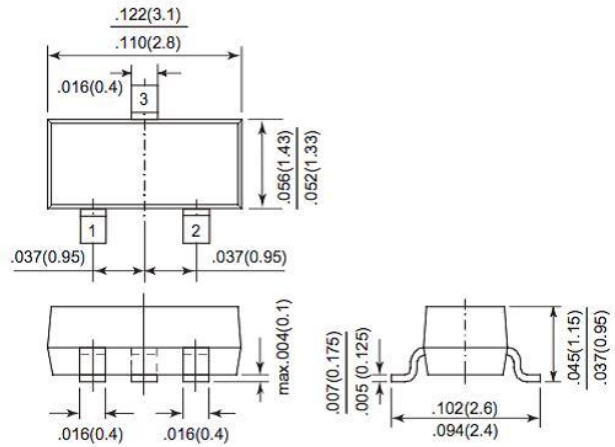
3,000/Reel



**RoHS
COMPLIANT**

Graphic symbol

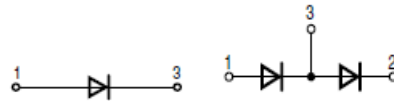
SOT-23



Graphic symbol

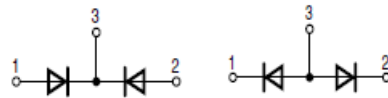
BAS 70

BAS 70-04



BAS 70-05

BAS 70-06



ORDERING INFORMATION

Type	Marking	Pin Configuration			Package
BAS70	73s	1=A	2 n.c	3=C	SOT-23
BAS70-04	74s	1=A1	2 =C2	3=C1/A2	SOT-23
BAS70-05	75s	1=A1	2 =A2	3=C1/C2	SOT-23
BAS70-06	76s	1=C1	2 =C2	3=A1/A2	SOT-23

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings

Symbol	Parameter	Value	Unit
VR	Diode reverse voltage	70	V
IF	Forward current IF	70	mA
IFSM	Surge forward current, t ≤ 10ms	100	mA
Ptot	Total power dissipation BAS 70, TS ≤ 66°C	250	mW
Ptot	BAS 70-04, BAS 70-05, BAS 70-06, TS ≤ 40°C	250	mW
TJ	Junction temperature	150	°C
TOP	Operating temperature range	-55 to +150	°C
TSTG	Storage temperature	-55 to +150	°C

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Maximum Ratings

Symbol	Parameter	Value	Unit
RthJA	Junction - ambient BAS 70	≤405	K/W
RthJA	Junction - ambient BAS 70-04	≤575	K/W
RthJS	Junction - soldering point BAS 70	≤335	K/W
RthJS	Junction - soldering point BAS 70-04	≤435	K/W

1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 6cm² Cu

Electrical Characteristics at TA = 25°C, unless otherwise specified.

DC characteristics

Symbol	Parameter	MIN	TYP	MAX	UNIT
V(BR)	Breakdown voltage I(BR) = 10 µA	70			V
IR	Reverse current µA VR = 50 V VR = 70 V			0.1 1.0	µA
VF	Forward voltage IF = 1 mA IF = 10 mA IF = 15 mA		375 705 880	410 750 1000	mV

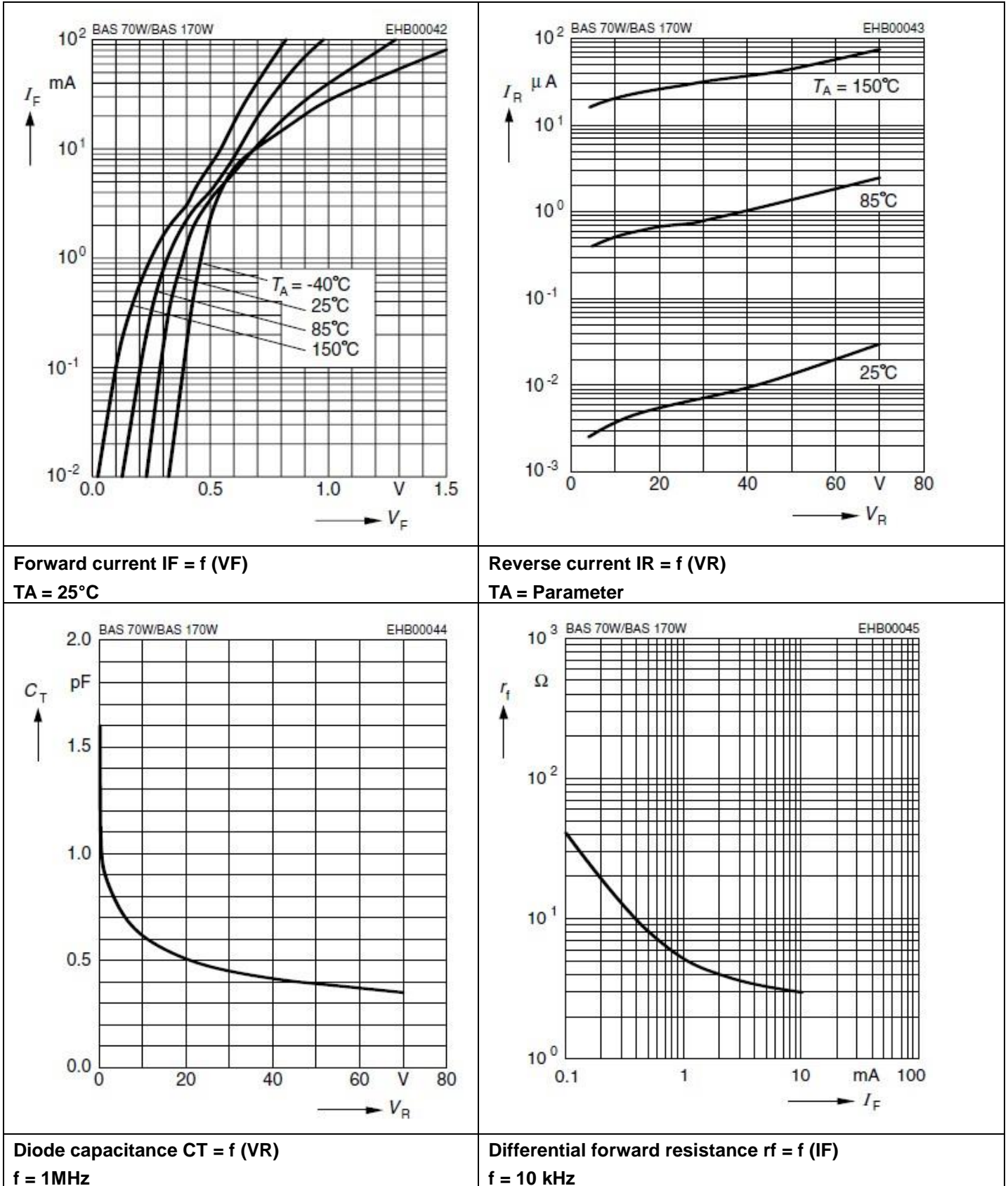
AC characteristics

Symbol	Parameter	MIN	TYP	MAX	UNIT
CT	Diode capacitance CT - pF VR = 0 V, f = 1 MHz		1.6	2	pF
τ	Charge carrier life time ps IF = 25 mA			100	ps
RF	Differential forward resistance IF = 10 mA, f = 10 kHz		30		Ω

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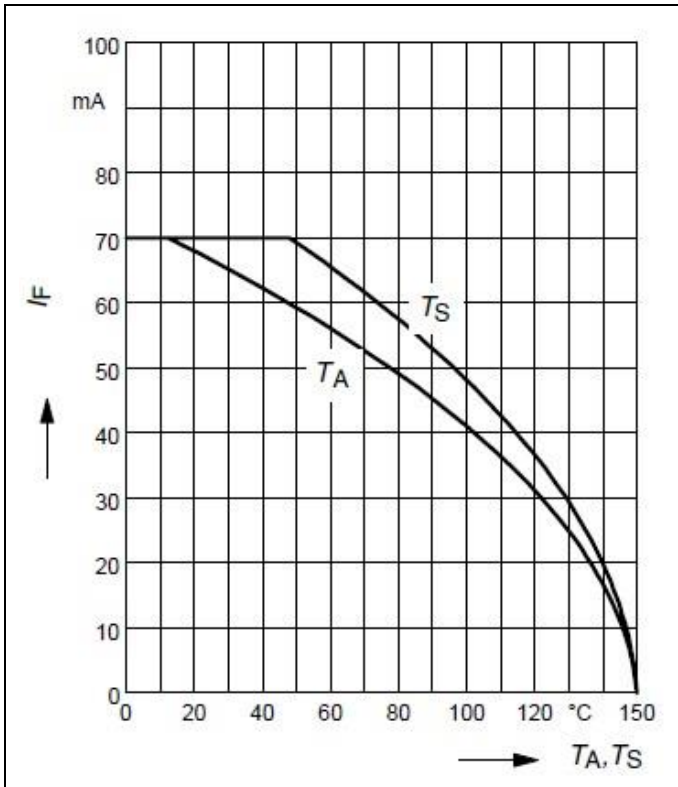
■ RATINGS AND CHARACTERISTIC CURVES



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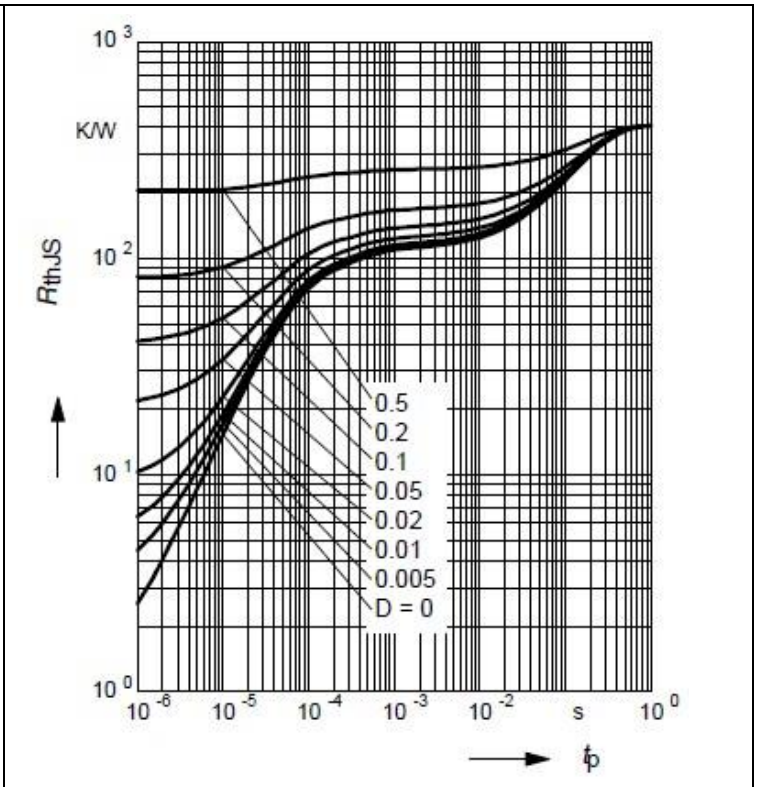
Schottky Diodes

■ RATINGS AND CHARACTERISTIC CURVES

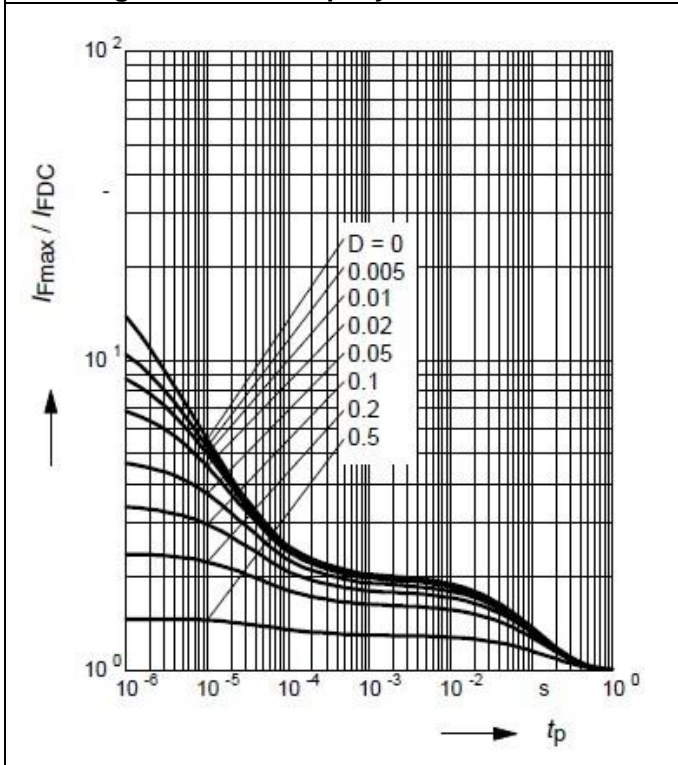


Forward current $I_F = f(T_A; T_S)$

* Package mounted on epoxy



Permissible pulse load $R_{thJS} = f(t_p)$



Permissible Pulse Load

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

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