

Surface Mount Schottky Barrier Diode BAS40T/-04T/-05T/-06T

FEATURES

- Low forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.

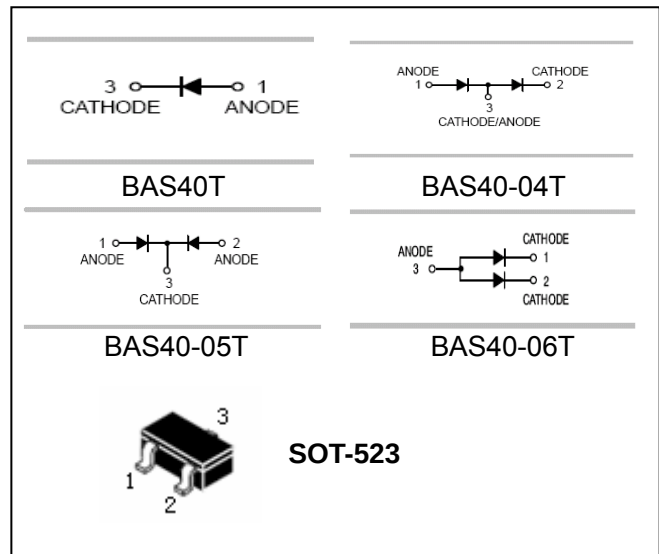


Lead-free

APPLICATIONS

- General purpose switching application.

ORDERING INFORMATION



Type No.	Marking	Package Code
BAS40T	43	SOT-523
BAS40-04T	44	SOT-523
BAS40-05T	45	SOT-523
BAS40-06T	46	SOT-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

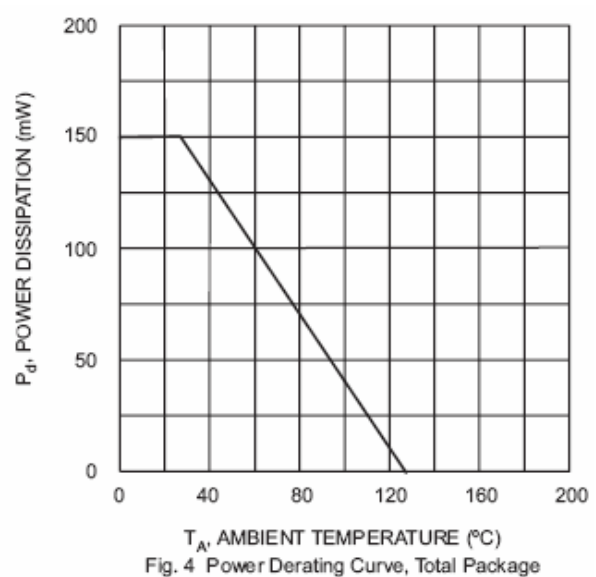
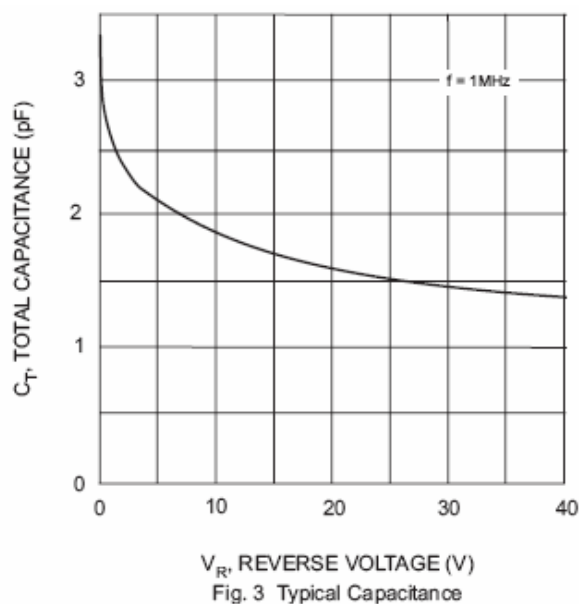
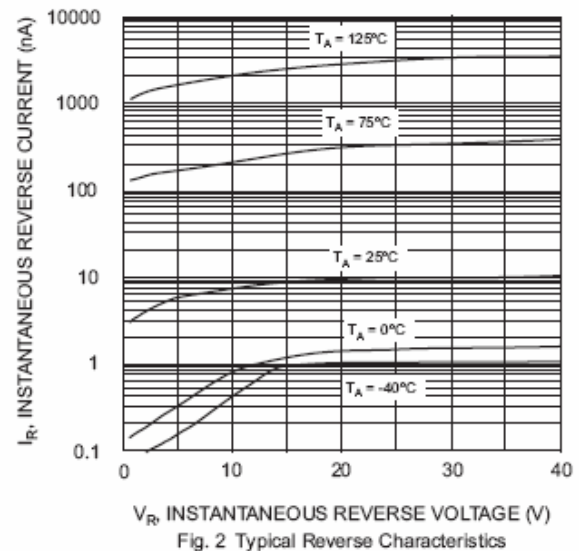
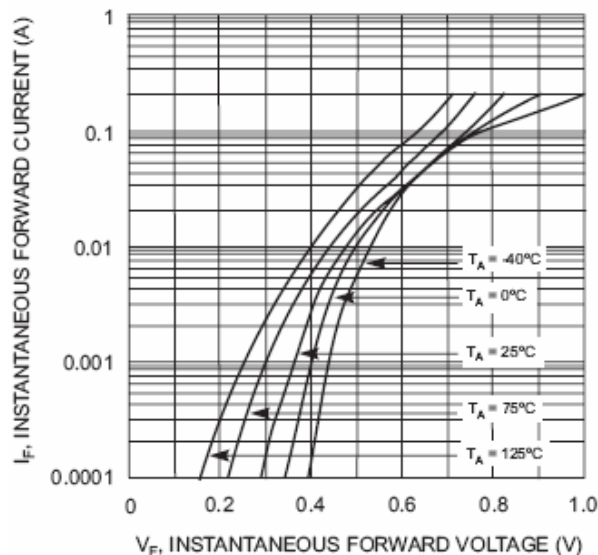
Symbol	Parameter	Value	Units
V_{RRM}	Peak repetitive reverse voltage	40	V
V_{RWM}	Working peak reverse voltage		
V_R	DC reverse voltage		
$V_{R(RMS)}$	RMS reverse voltage	28	V
I_F	Forward continuous voltage	200	mA
I_{FSM}	Non-repetitive peak forward surge current @t=1.0s	600	mA
P_d	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance junction to ambient	833	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65~150	°C

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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$	40		V
Leakage current	I_R	$V_R=30\text{V}$		200	nA
Forward voltage	V_F	$I_F=1.0\text{mA}, t_p<300\mu\text{s}$ $I_F=40\text{mA}, t_p<300\mu\text{s}$		380 1000	mV
Typical total capacitance	C_T	$V_R=0\text{V}, f=1\text{MHz}$		5.0	pF
Reverse recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$		5.0	ns

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

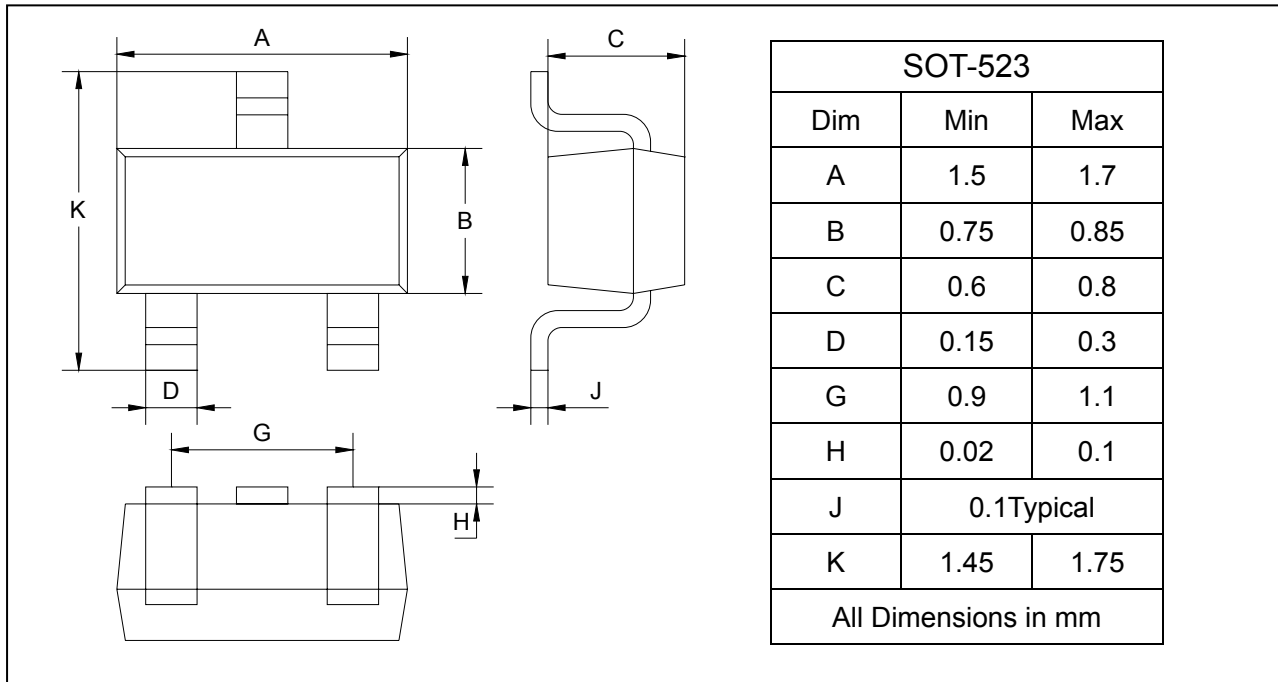


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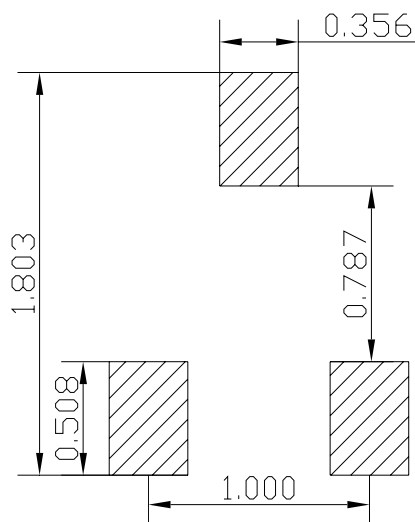
PACKAGE OUTLINE

Plastic surface mounted package

SOT-523



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS40T/-04T/-05T/06T	SOT-523	3000/Tape&Reel