

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching Speed
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

APPLICATIONS

- High Conductance Ultra-Fast Diode

MARKING

HA7

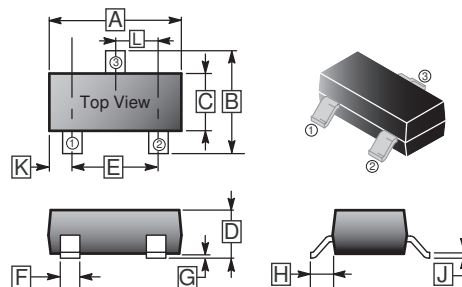
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

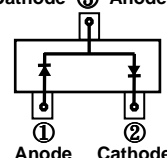
Part Number	Type
BAV99R-C	Lead (Pb)-free and Halogen-free

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.65	3.10	G	0	0.18
B	2.10	3.00	H	0.55	REF.
C	1.10	1.80	J	0.05	0.26
D	0.89	1.40	K	0.60	REF.
E	1.70	2.30	L	0.95	TYP.
F	0.28	0.55			

Cathode ③ Anode



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

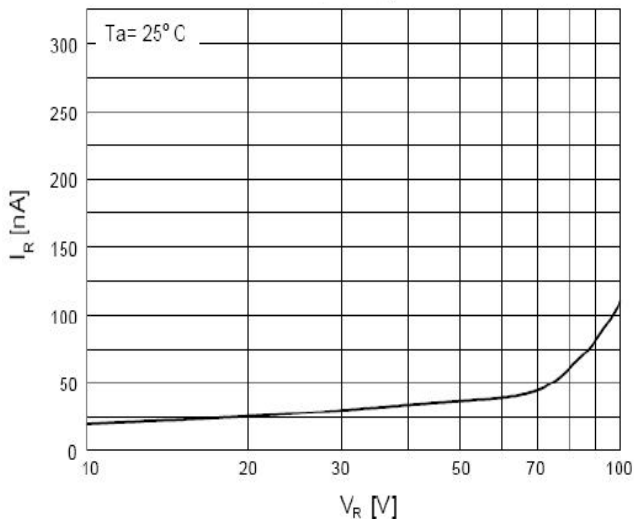
Parameter	Symbol	Ratings	Unit
Maximum Repetitive Reverse Voltage	V _{RRM}	70	V
Average Rectified Forward Current	I _F	200	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM}	Pulse Width=1s	1
		Pulse Width=1ms	2
Power Dissipation	P _D	350	mW
Thermal Resistance, Junction-Ambient	R _{θJA}	357	°C/W
Operating Junction & Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

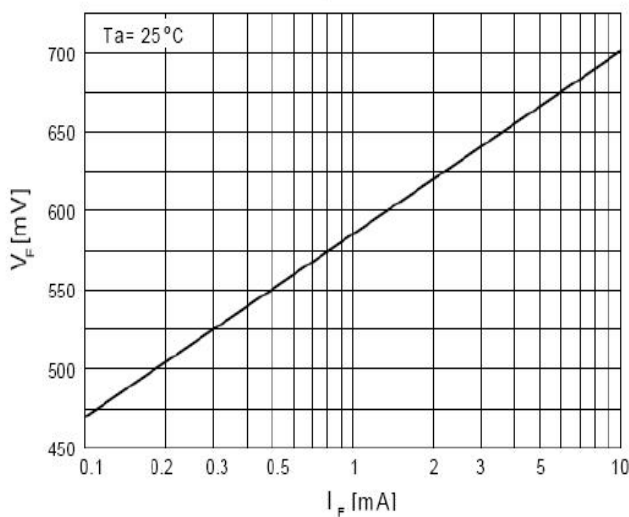
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V _{(BR)R}	70	-	-	V	I _R =100μA
Forward Voltage	V _F	-	-	715	mV	I _F =1mA
		-	-	855		I _F =10mA
		-	-	1000		I _F =50mA
		-	-	1250		I _F =150mA
Instantaneous Reverse Current	I _R	-	-	2.5	μA	V _R =70V
		-	-	30		V _R =25V, T _A =150°C
		-	-	50		V _R =70V, T _A =150°C
Total Capacitance	C _T	-	1.5	-	pF	V _R =0, f=1MHz
Reverse Recovery Time	t _{rr}	-	4	-	nS	I _F =I _R =10mA, I _{RR} =1mA, R _L =100Ω

RATINGS AND CHARACTERISTIC CURVES

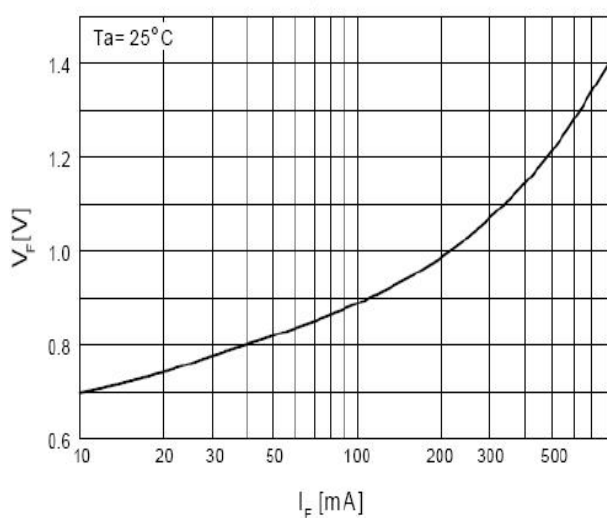
$I_R - V_R$



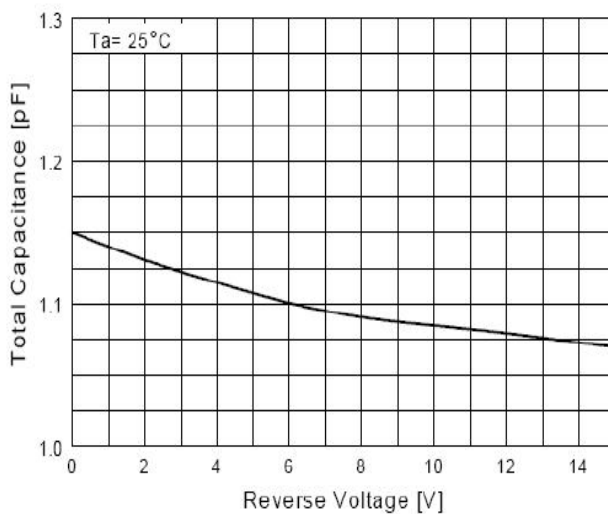
$V_F - I_F$



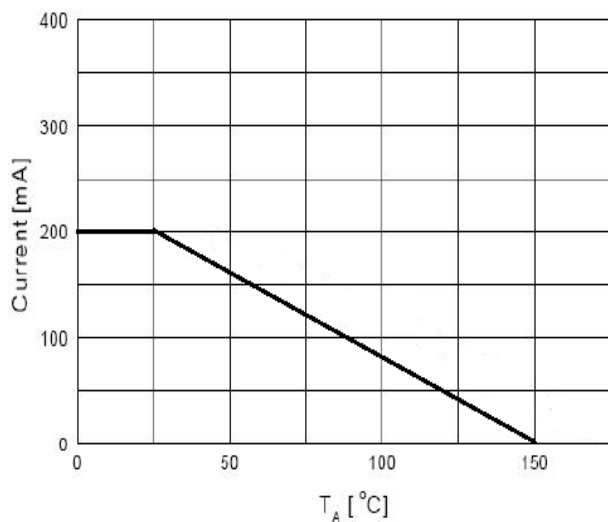
$V_F - I_F$



Capacitance Characteristics



$I_F - T_A$



Mounting Pad Layout

