

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

FEATURES

- Low Forward Voltage Drop
- Extremely Fast Switching Speed
- Low Current Leakage
- Qualified to AEC-Q101 Standards for High Reliability

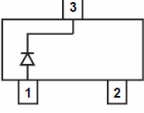
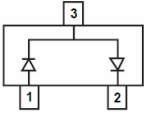
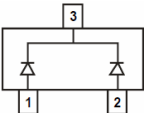
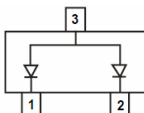
MECHANICAL DATA

- Case: SOT-23
- Terminals: solderable per MIL-STD-202, Method 208
- Lead (Pb)-free and Halogen-free

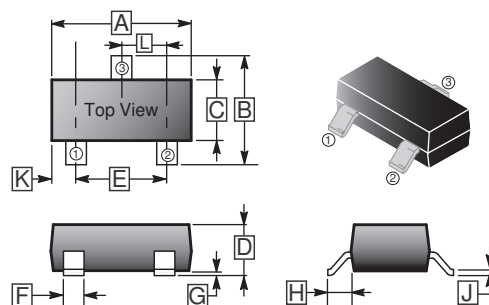
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Equivalent Circuit	Marking
BAS70CR-C		73
BAS70-04CR-C		74
BAS70-05CR-C		75
BAS70-06CR-C		76

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	0.08	0.26
D	0.89	1.40	K	0.60	REF.
E	1.70	2.30	L	0.95	TYP.
F	0.30	0.55			

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

Parameter	Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	70	V
Working Peak Reverse Voltage	V _{RWM}		
DC Reverse Voltage	V _R		
RMS Reverse Voltage	V _{RMS}	49	
Forward Continuous Current	I _F	70	mA
Power Dissipation ¹	P _D	200	mW
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	100	mA
Thermal Resistance from Junction-Ambient	R _{θJA}	500	°C/W
Operating Junction Temperature Range	T _J	-55~125	°C
Storage Temperature Range	T _{STG}	-55~150	

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage ²	V_F	-	-	0.41	V	$I_F=1\text{mA}$
		-	-	1		$I_F=15\text{mA}$
Reverse Current ³	I_R	-	-	100	nA	$V_R=50\text{V}$
Junction Capacitance	C_J	-	2	-	pF	$V_R=0\text{V}$, $f=1\text{MHz}$
Reverse Recovery Time	T_{rr}	-	5	-	nS	$I_F=I_R=10\text{mA}$, $I_R=1\text{mA}$, $R_L=100\Omega$

Notes:

1. Part mounted on FR-4 board with recommended pad layout.
2. Pulse test, $t_p \leq 300\mu\text{s}$.
3. Pulse test, $t_p \leq 5\text{ms}$.

RATINGS AND CHARACTERISTIC CURVES

FIG 1.TYPICAL REVERSE CHARACTERISTIC

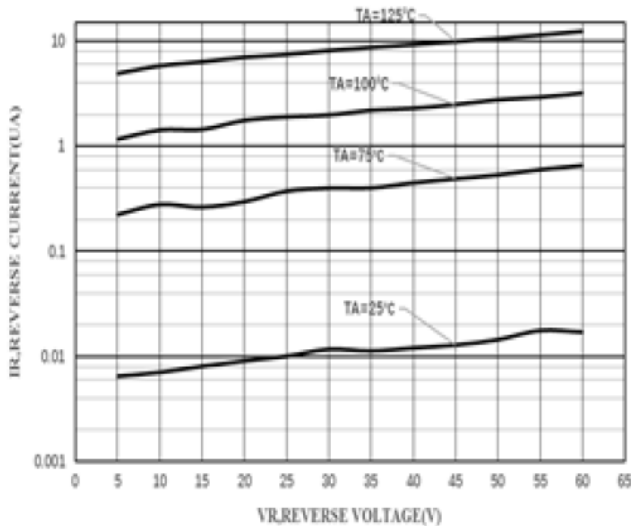


FIG 2.TYPICAL FORWARD CHARACTERISTIC

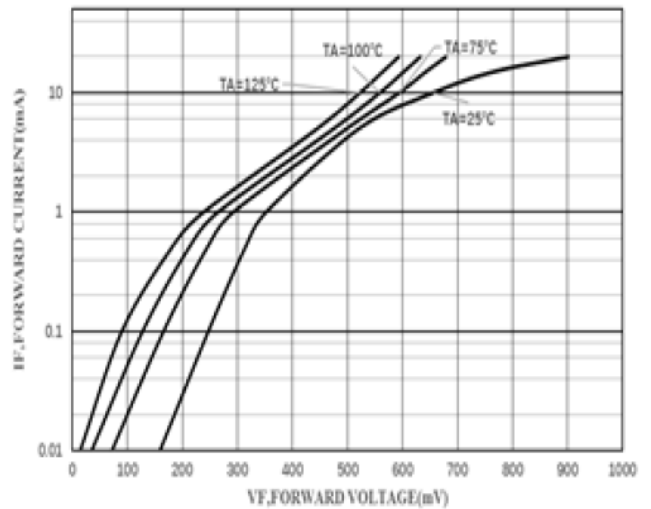


FIG 3.CAPACITANCE VS REVERSE VOLTAGE

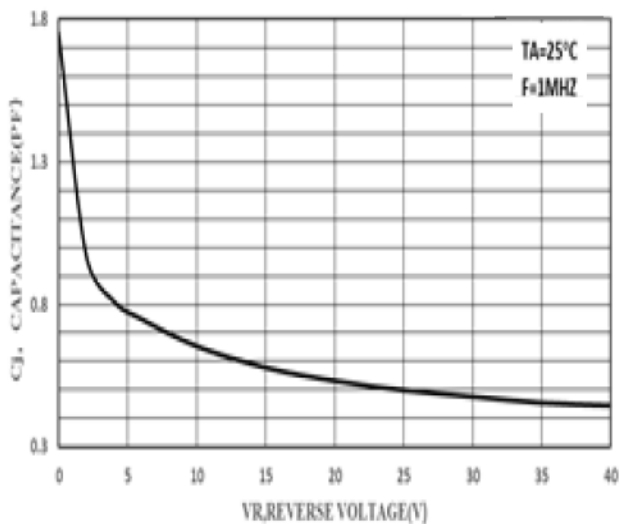


FIG 4.DERATING CURVE(Pd-TA)

