

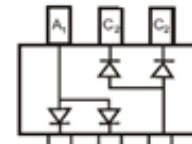
Features

- Fast switching
- Low forward voltage drop
- Ultra-small surface mount package
- RoHS compliant with Halogen-free
- PN junction guard ring for transient and ESD protection

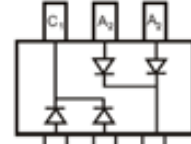
HF

Mechanical Data

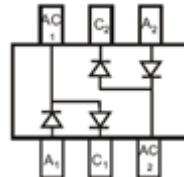
- Case: SOT-363
- Terminals: solderable per MIL-STD-202, Method 208



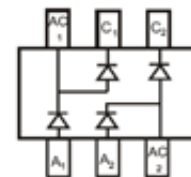
BAS40DW-06



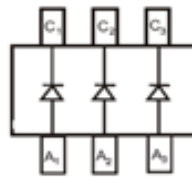
BAS40DW-05



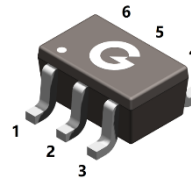
BAS40DW-04



BAS40BRW



BAS40TW



SOT-363

Ordering Information

Part Number	Package	Shipping	Marking Code
BAS40TW	SOT-363	3000 pcs / Tape & Reel	K43
BAS40DW-04	SOT-363	3000 pcs / Tape & Reel	K44
BAS40DW-05	SOT-363	3000 pcs / Tape & Reel	K45
BAS40DW-06	SOT-363	3000 pcs / Tape & Reel	K48
BAS40BRW	SOT-363	3000 pcs / Tape & Reel	K47

Maximum Ratings (@T_A=25°C unless otherwise specified)

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}		
DC Reverse Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	28	V
Forward Continuous Current *	I _F	200	mA
Non-Repetitive peak forward surge current @8.3ms	I _{FSM}	600	mA
Power Dissipation *	P _D	200	mW
* part mounted on FR-4 board with recommended pad layout			

Thermal Characteristics

Parameter	Symbol	Limits	Unit
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	$^{\circ}C/W$
Operating Temperature Range	T_j	-55 to +125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

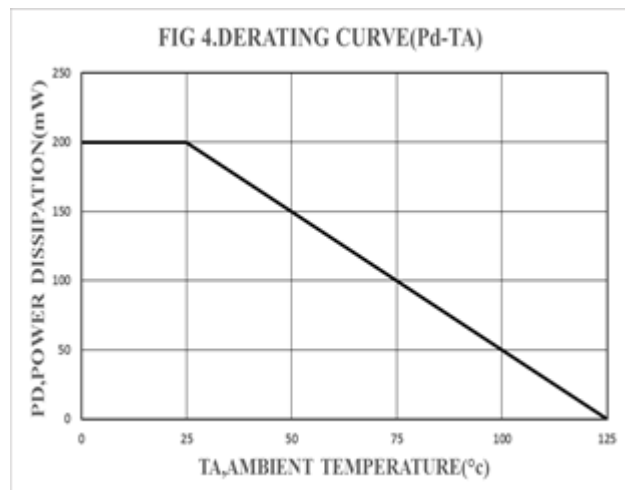
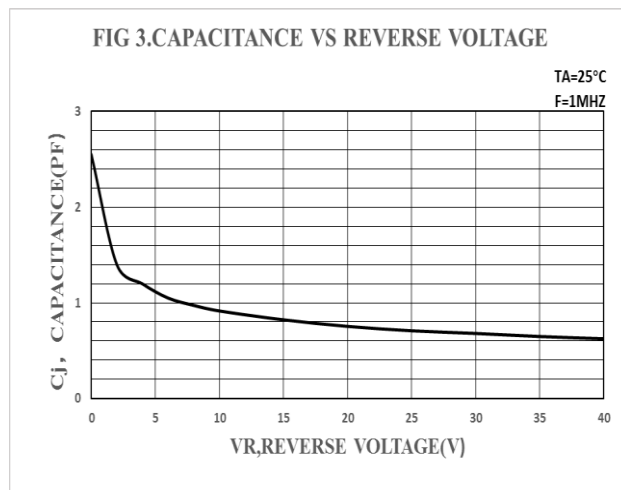
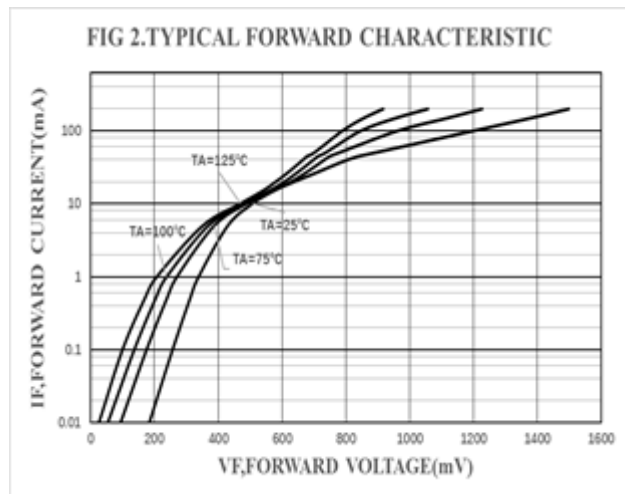
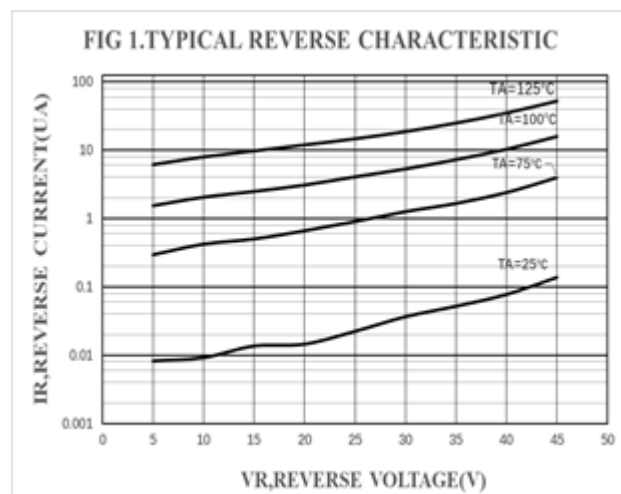
Electrical Characteristics (@ $T_A=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage *1	V_F	$I_F=1mA$			0.38	V
		$I_F=40mA$			1	V
Reverse current *2	I_R	$V_R=30V$			0.2	μA
Capacitance Between Terminals	C_T	$V_R=0V, f=1MHz$		2.5	5	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$ $I_{rr}=1.0mA, R_L=100\Omega$			5	ns

*1: pulse test, $t_p \leq 300\mu s$

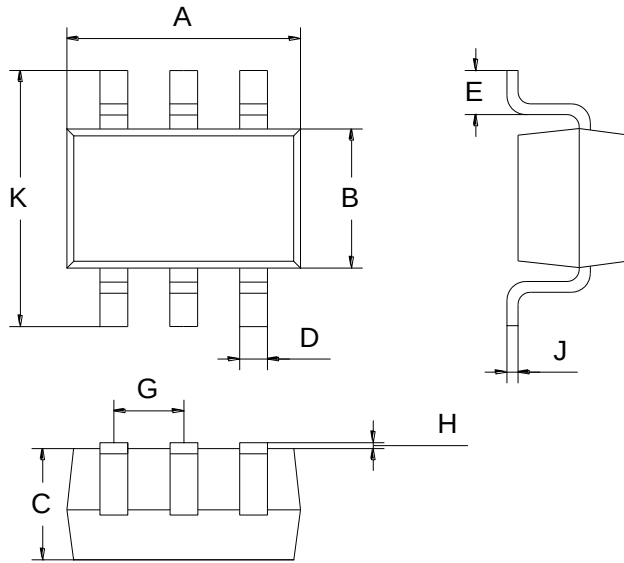
*2: pulse test, $t_p \leq 5ms$

Ratings and Characteristic Curves ($T_A=25^{\circ}C$ unless otherwise noted)



Package Outline Dimensions (unit: mm)

SOT-363



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout (unit: mm)

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