

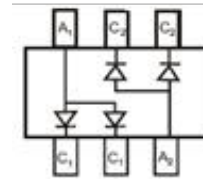
Features

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

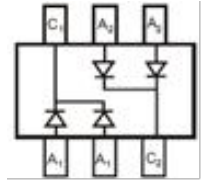
HF

Mechanical Data

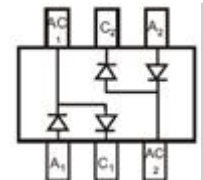
- Case: SOT-363
- Terminals: solderable per MIL-STD-202, Method 208



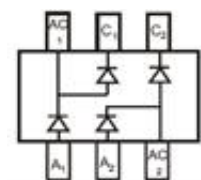
BAS40DW-06



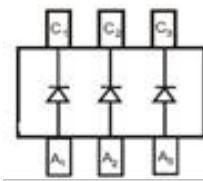
BAS40DW-05



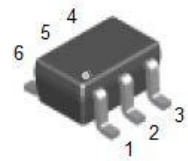
BAS40DW-04



BAS40BRW



BAS40TW



SOT-363

Ordering Information

Part Number	Package	Shipping	Marking Code
BAS40TW	SOT-363	3000pcs / Tape & Reel	K43
BAS40DW-04	SOT-363	3000pcs / Tape & Reel	K44
BAS40DW-05	SOT-363	3000pcs / Tape & Reel	K45
BAS40DW-06	SOT-363	3000pcs / Tape & Reel	K48
BAS40BRW	SOT-363	3000pcs / 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	$^{\circ}\text{C/W}$
Operating Temperature Range	T_j	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

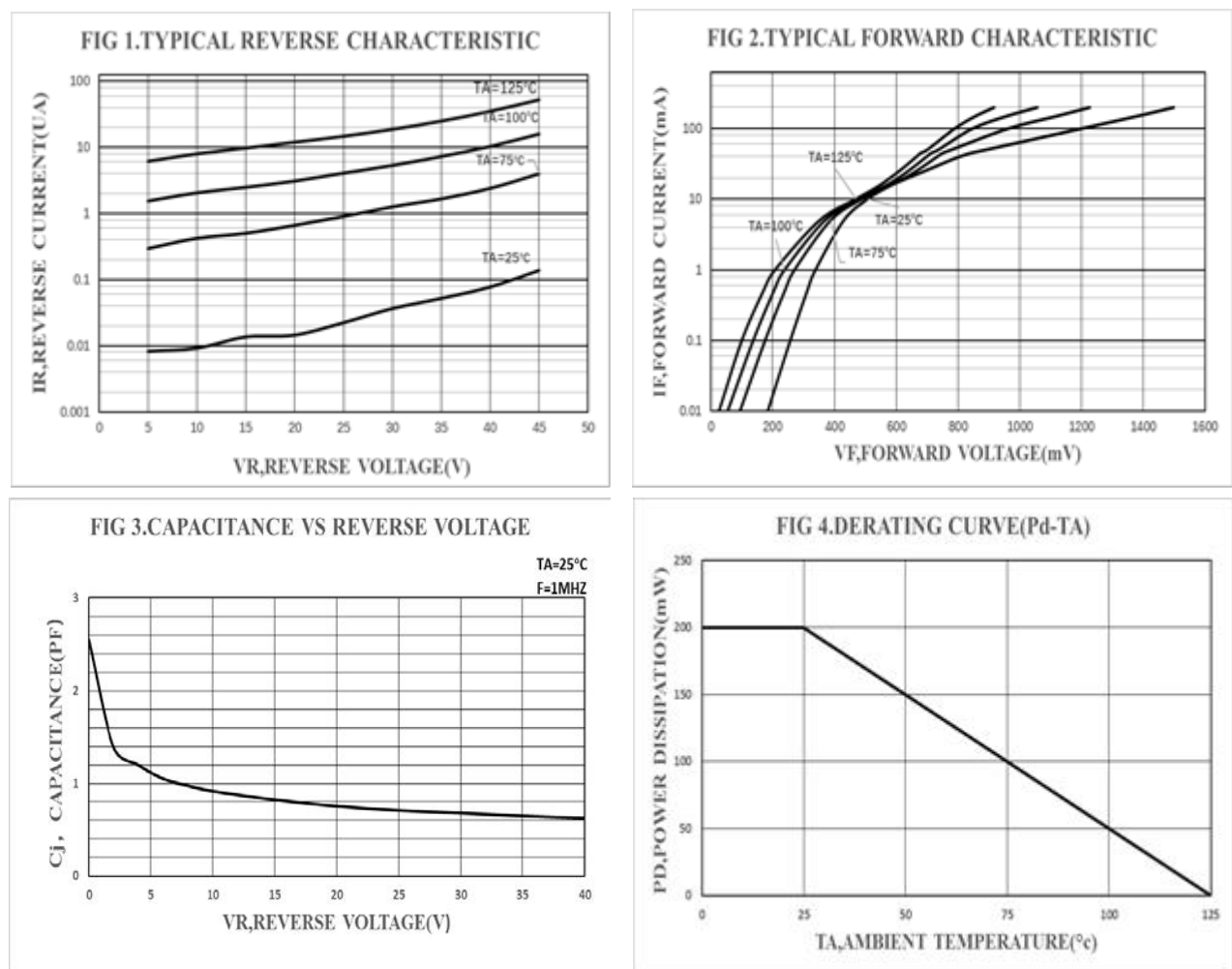
Electrical Characteristics (@ $T_A=25^{\circ}\text{C}$ unless otherwise specified)

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

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

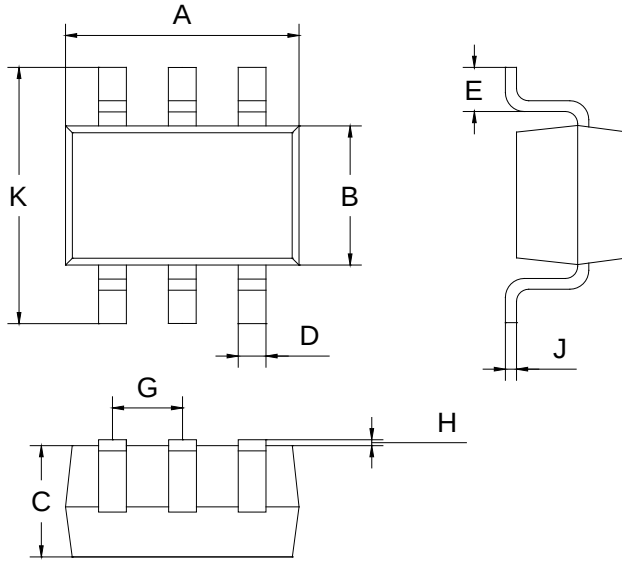
*2: pulse test, $t_p \leq 5\text{ms}$

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



Package Outline Dimensions (unit: mm)

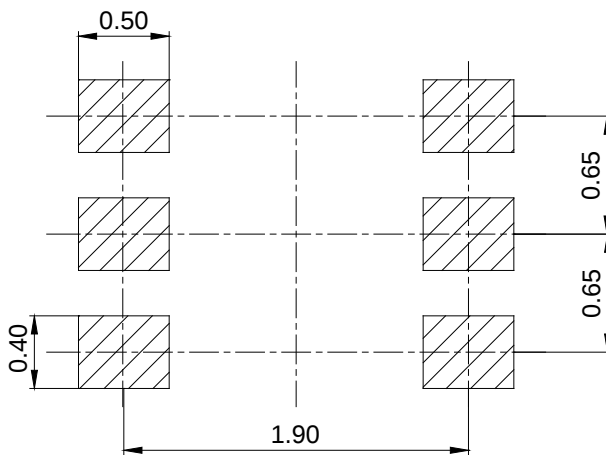
SOT-363



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)

SOT-363



IMPORTANT NOTICE

Galaxy Microelectronics (GME) reserves the right to make changes without further notice to any product herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.