

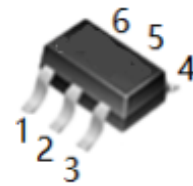
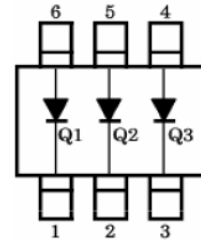


Features

- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type

Typical Applications

- For general purpose applications



SOT-363

Mechanical Data

- Case: SOT-363
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
SD103ATW	SOT-363	3000 pcs / Tape & Reel	KLL

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

Characteristic	Symbol	SD103ATW	Units
Peak repetitive reverse voltage	V _{RRM}	40	V
RMS Reverse voltage	V _{RMS}	28	V
Maximum average forward output current	I _{F(AV)}	150	mA
Peak forward surge current, 8.3ms single half-sine-wave	I _{FSM}	1.5	A

Thermal Characteristics

Parameter	Symbol	Value	Units
Power dissipation	P _D	200	mW
Typical thermal resistance per leg	R _{θJA} *	500	°C /W
Operating junction temperature range	T _J	125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

* Part mounted on FR-4 board with recommended pad layout

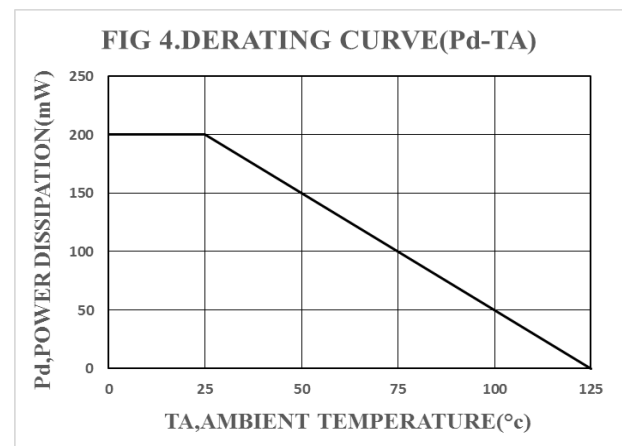
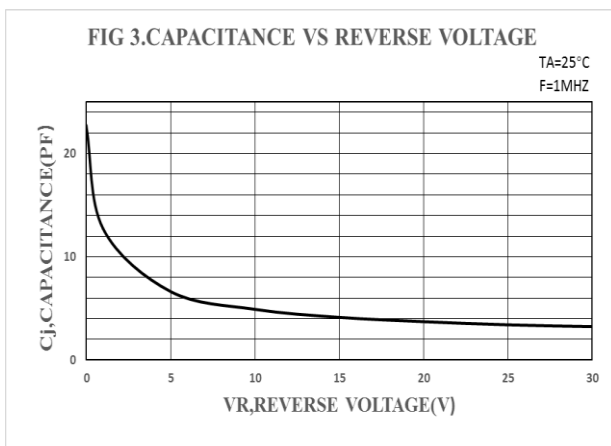
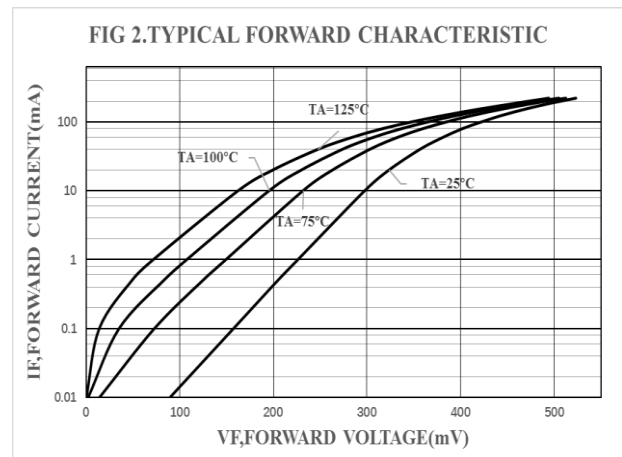
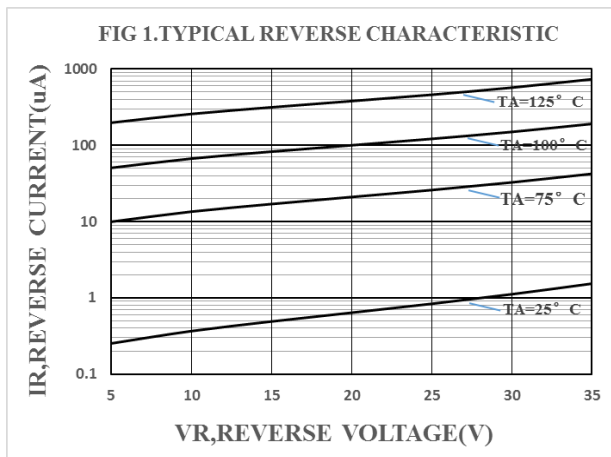


Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=20\text{mA}$	-	-	0.37	V
		$I_F=100\text{mA}$	-	-	0.50	
		$I_F=200\text{mA}$	-	-	0.60	
Maximum Peak Reverse Current	I_R^{**}	$V_R=30\text{V}$	-	-	5	uA
		$V_R=10\text{V}$	-	-	2	
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$	-	22	50	pF

*Pulse width $\leq 380\text{ uS}$, Duty cycle $< 2\%$
 **pulse test , $t_p \leq 5\text{ms}$

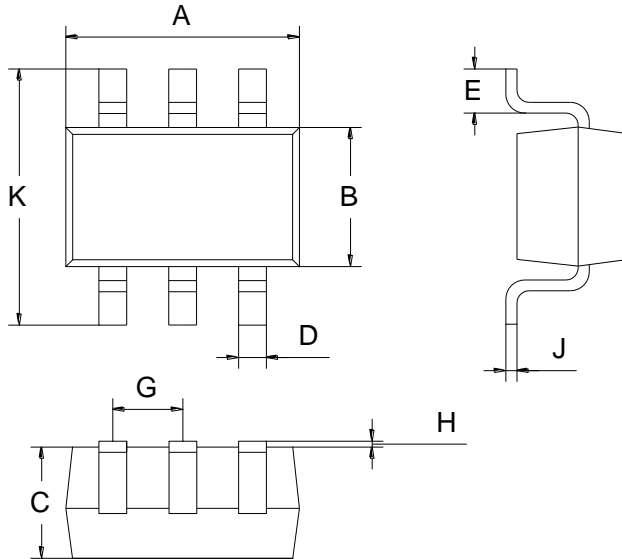
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)





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

