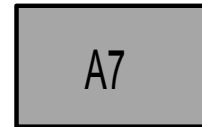
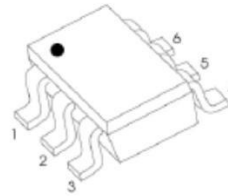


Features

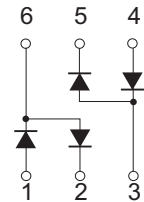
Fast Switching Speed
Ultra-Small Surface Mount Package
For General Purpose Switching Applications
High Conductance



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Equivalent Circuit



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

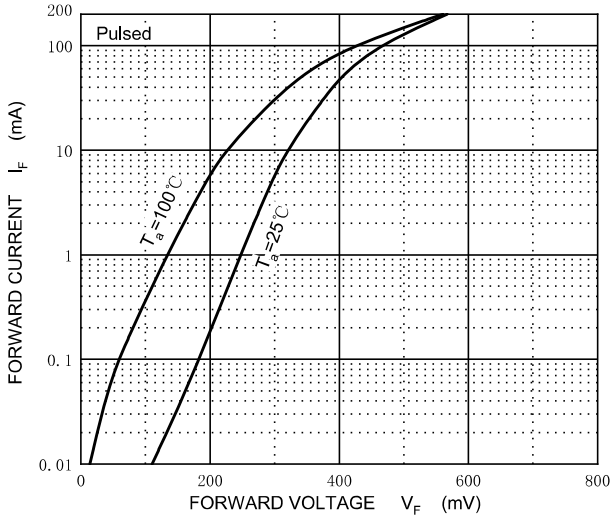
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	@ $t = 1.0\mu\text{s}$ 2	A
		@ $t = 1.0\text{s}$ 1	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

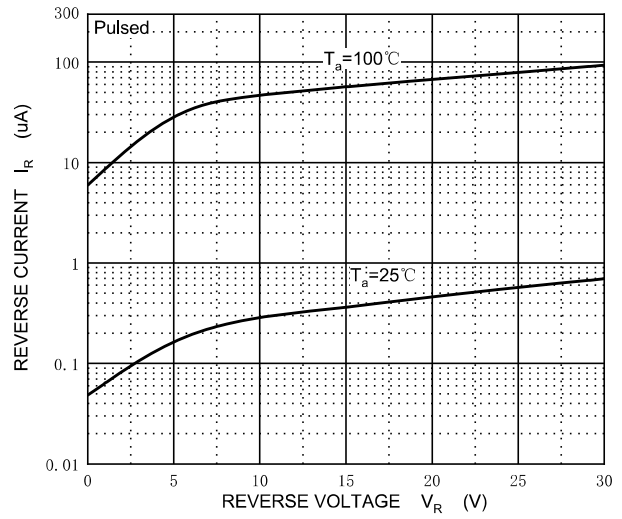
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=2.5\mu\text{A}$	75		V
Reverse voltage leakage current	I_R	$V_R=75\text{V}$ $V_R=20\text{V}$		2.5 0.025	μA
Forward voltage	V_F	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		0.715 0.855 1.000 1.250	V
Junction capacitance	C_T	$V_R=0, f=1\text{MHz}$		2	pF
Reveres recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$		4	ns

RATING AND CHARACTERISTIC CURVES

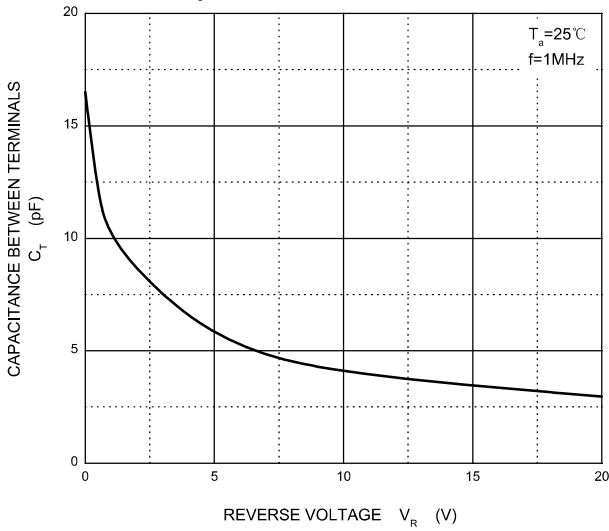
Forward Characteristics



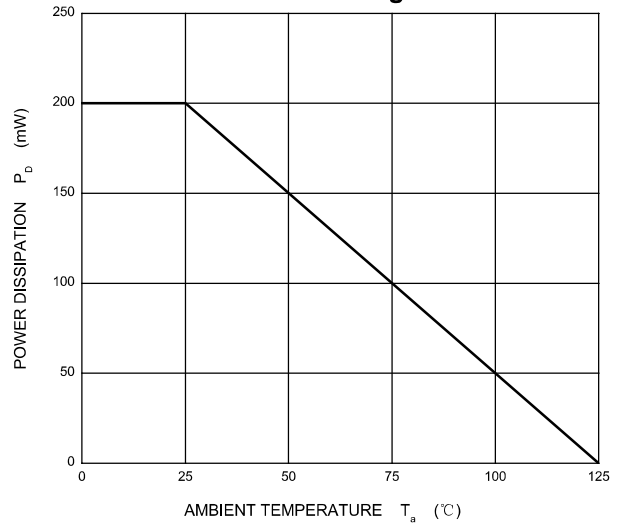
Reverse Characteristics



Capacitance Characteristics

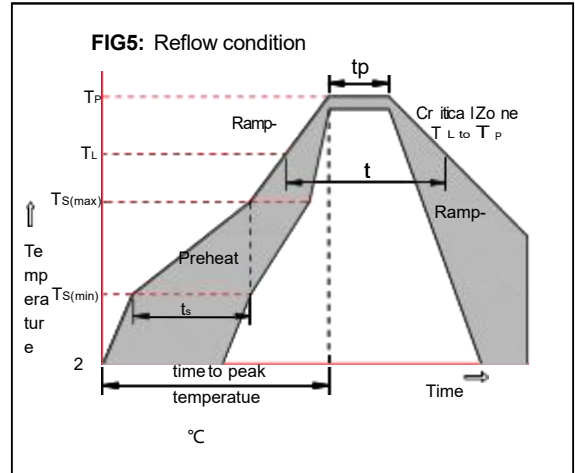


Power Derating Curve



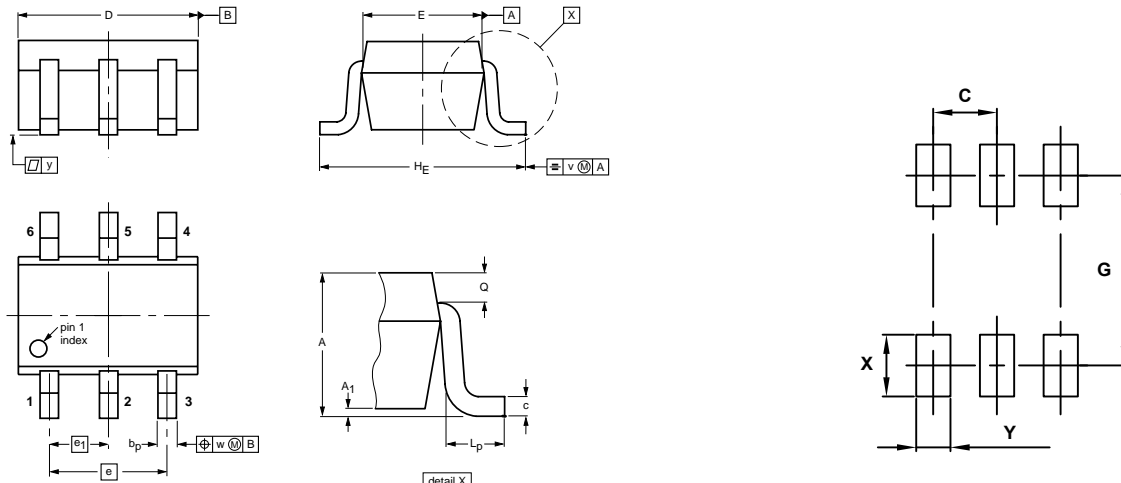
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C



Package Dimensions & Suggested Pad Layout

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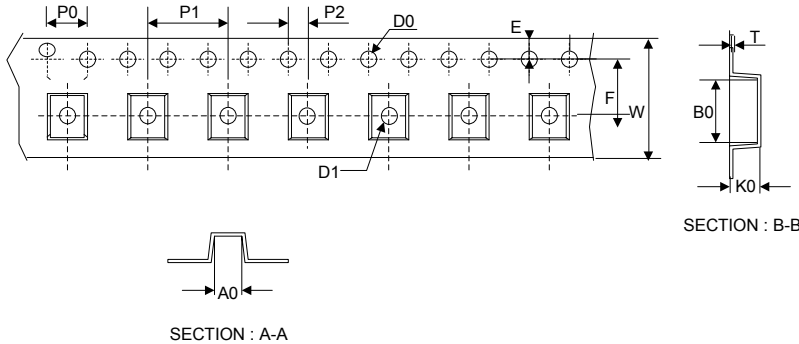
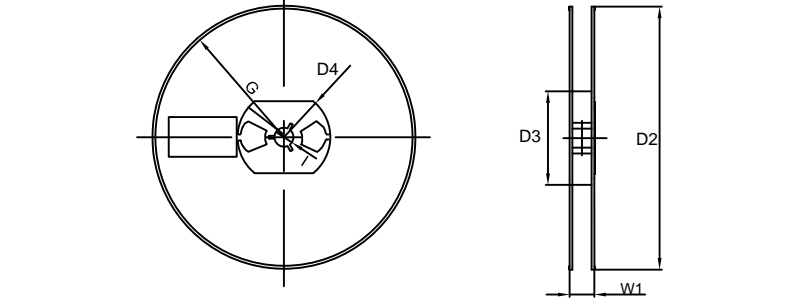


Dimensions	Value (in mm)
C	0.65
G	1.90
X	0.85
Y	0.40

DIMENSIONS (mm are the original dimensions)

UNIT	A	A1 max	bp	c	D	E	e	e1	HE	Lp	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Tape & reel specification

Tape	Symbol	Dimension (mm)	
	P0	4.00±0.20	
	P1	4.00±0.20	
	P2	2.00±0.20	
	D0	1.55±0.20	
	D1	1.00±0.20	
	E	1.55±0.25	
	F	3.60±0.20	
	W	8.00±0.20	
	A0	3.00±0.20	
	B0	3.00±0.20	
	K0	1.30±0.20	
	T	0.20±0.20	
	<p>7" Reel</p> 	D2	177.0±5.0
		D3	55Min.
		D4	R24.6±2.0
G		R82.0±2.0	
I		13.0±2.0	
W1		10.20±3.0	
Quantity: 3000PCS			