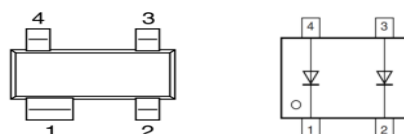


Features

- * High switching speed: $t_{rr} \leq 4 \text{ ns}$
- * Reverse voltage: $V_R \ 80 \text{ V}$
- * Repetitive peak reverse voltage: $V_{RRM} \ 100 \text{ V}$
- * Repetitive peak forward current: $I_{FRM} \ 4 \text{ A}$
- * small SMD package

Applications

- * High-speed switching in e.g. surface-mounted circuits



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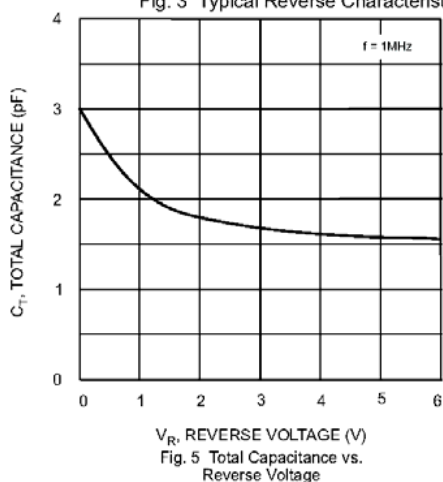
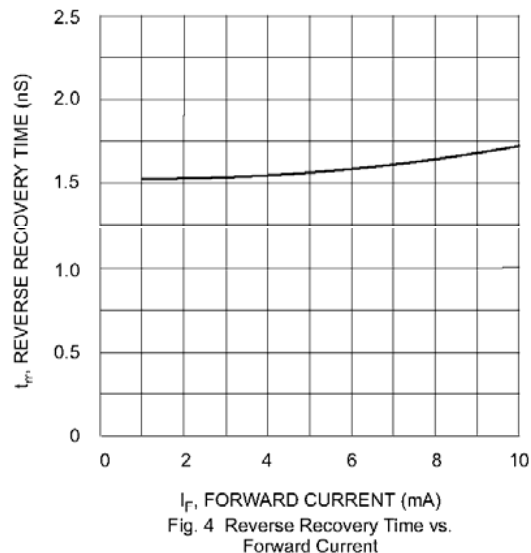
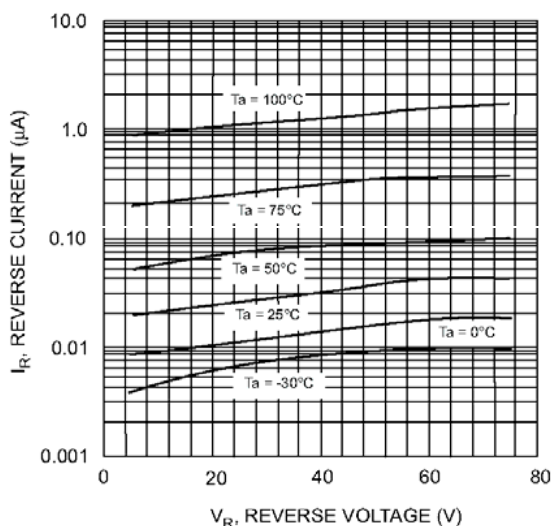
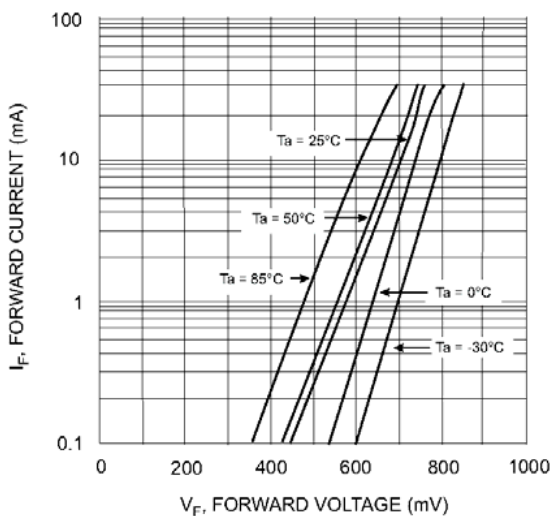
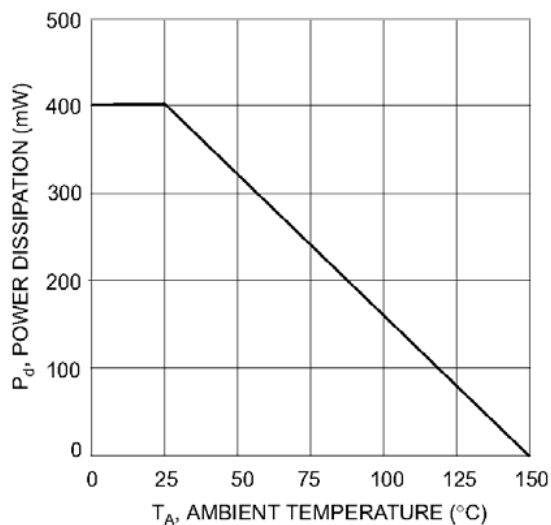
Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	215	mA
Forward Continuous Current	I_{FM}	500	mA
Non-Repetitive Peak Forward Surge Current (at $t = 1 \text{ } \mu\text{s}$)	I_{FSM}	4	A
Power Dissipation	P_d	400	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

Electrical Characteristics (TA = 25°C unless otherwise noted)

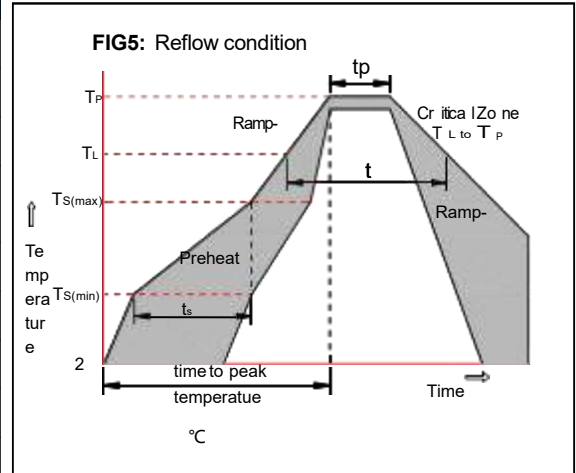
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 150 \text{ mA}$	V_F	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$, $T_J = 150^\circ\text{C}$ at $V_R = 25 \text{ V}$, $T_J = 150^\circ\text{C}$	I_R	- - - -	1000 30 50 30	nA nA μA μA
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5 \text{ V}$, $f = 1 \text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}	-	4	ns

RATING AND CHARACTERISTIC CURVES

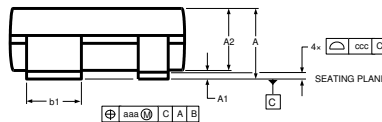
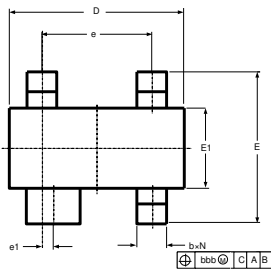


Soldering parameters

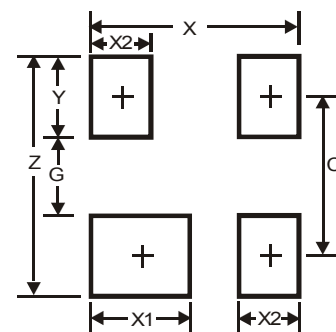
Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-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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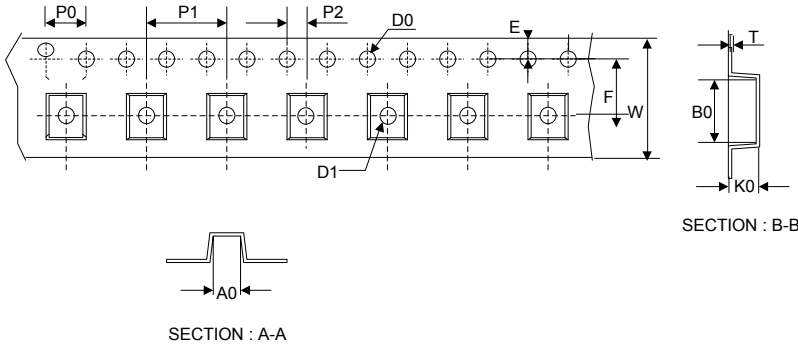
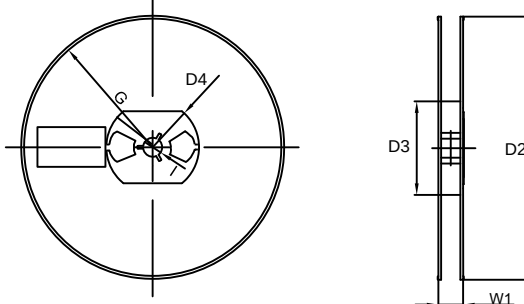


DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
b1	0.750	0.900	0.030	0.035
D	2.800	3.000	0.110	0.118
e	1.800	2.000	0.071	0.079
e1	0.200TYP		0.008TYP	
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
θ	0°	8°	0°	8°
aaa	.006		0.15	
bbb	.008		0.20	
ccc	.004		0.10	

Dimensions	Value (in mm)
Z	2.90
G	1.20
X	2.50
X1	1.00
X2	0.60
Y	0.85
C	2.05

Dimensions in inches and (millimeters)

Tape & reel specification

Tape		Symbol	Dimension (mm)
 SECTION : A-A SECTION : B-B		P0	4.00±0.20
		P1	4.00±0.20
		P2	2.00±0.20
		D0	1.55±0.20
		D1	1.20±0.20
		E	1.55±0.25
		F	3.60±0.20
		W	8.00±0.20
		A0	3.80±0.20
		B0	3.10±0.20
		K0	1.40±0.20
		T	0.20±0.20
		D2	177.0±5.0
		D3	55Min.
7" Reel		D4	R24.6±2.0
		G	R82.0±2.0
		I	13.0±2.0
		W1	10.20±3.0
		Quantity: 3000PCS	