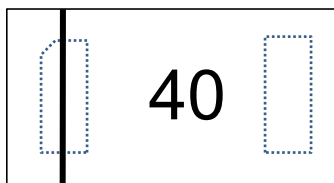
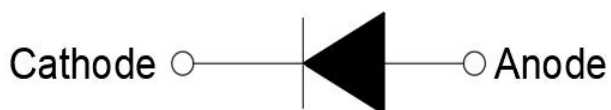


Features

- Small Surface Mounting Type
- Ideal for Automated Placement
- Ultrafast Reverse Recovery Time
- Low Power Losses, High Efficiency
- Low Forward Voltage Drop
- High Surge Capability
- RoHS Compliant

Appearance & Symbol



40=Marking Code

Mechanica Characteristics

- Package: DFN1006
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :10000pcs

Applications

- Low Voltage
- High-Frequency Inverters
- Free Wheeling
- Polarity Protection

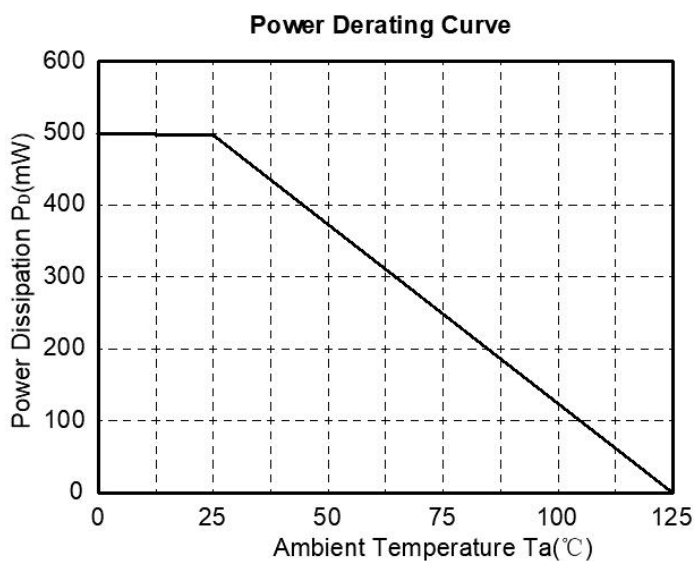
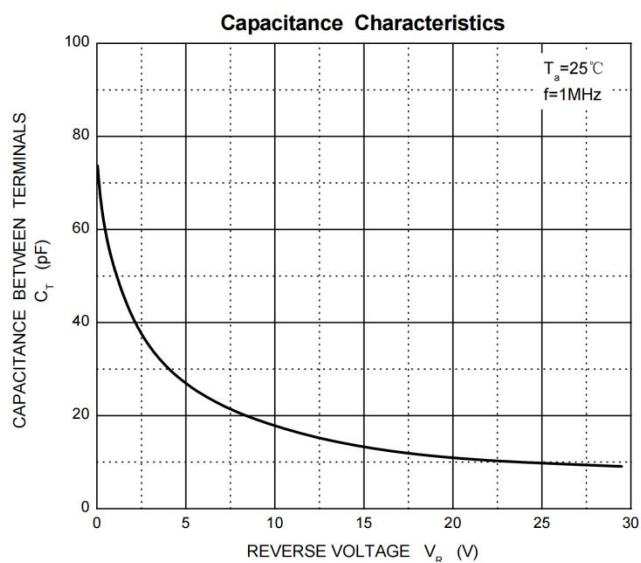
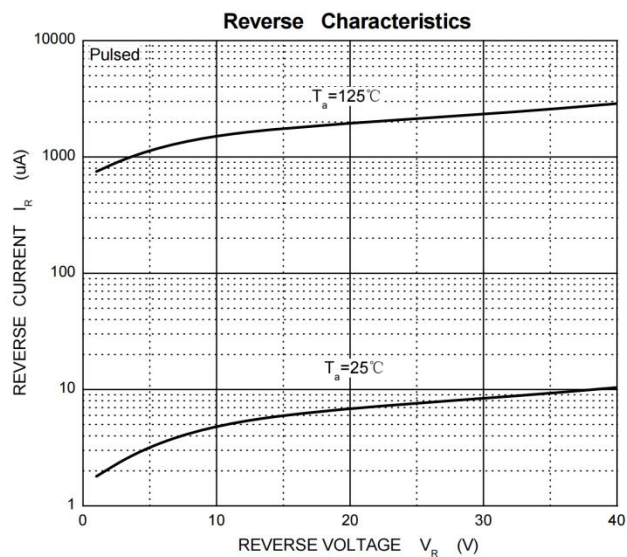
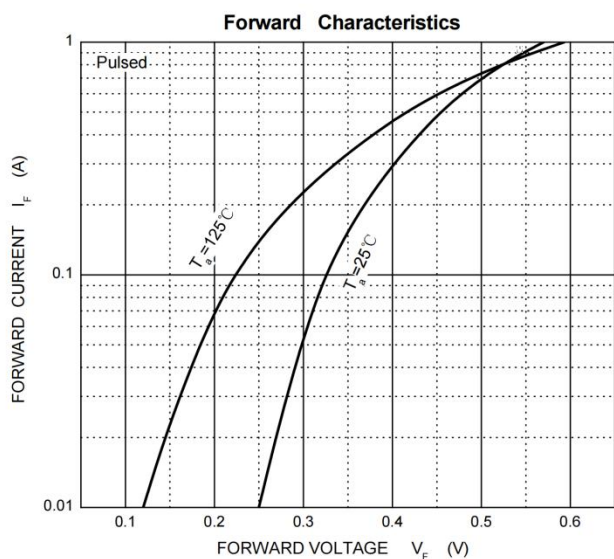
Absolute Maximum Ratings (T=25°C, RH=45%-75%, unless otherwise)

Parameters	Symbol	Value	Unit
Reverse Voltage (Repetitive Peak)	V_{RRM}	40	V
Reverse Voltage (RMS)	$V_{R(RMS)}$	32	V
DC Blocking Voltage	V_R	40	V
Average Rectified Output Current	I_O	1	A
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	7	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient(Typ)	$R_{\theta JA}$	120	°C/W
Junction Temperature	T_J	-55 ~ +125	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Electrical Characteristics (T=25°C, RH=45%-75%, unless otherwise noted)

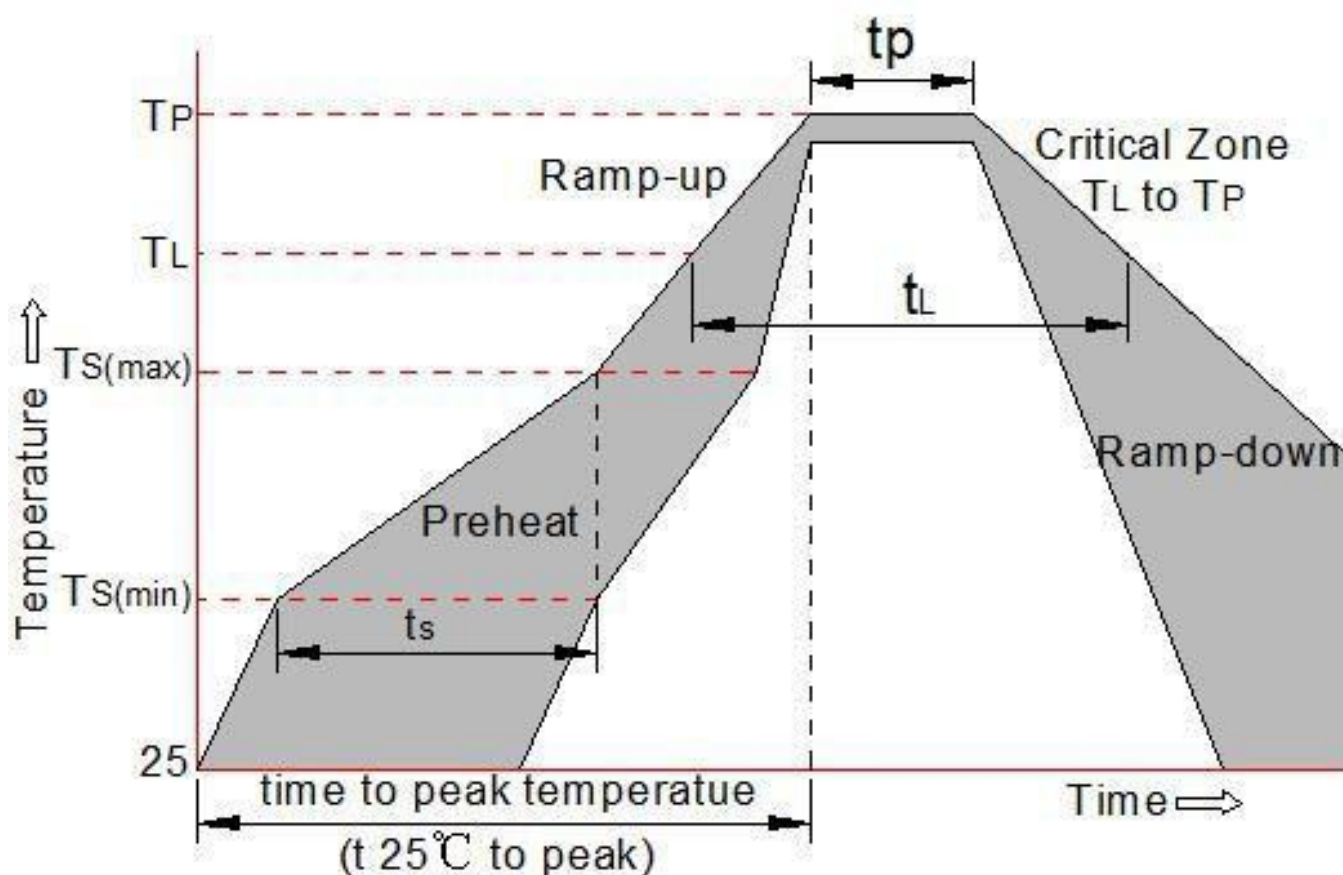
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA$	40			V
Reverse Current	I_R	$V_R=40V$		10	40	uA
Forward Voltage	V_F	$I_F=100mA$			0.38	V
		$I_F=200mA$			0.40	
		$I_F=500mA$			0.49	
		$I_F=700mA$			0.55	
		$I_F=1A$			0.61	
Total Capacitance	C_T	$V_R=0V, f=1MHz$		75	120	pF

Typical Characteristics

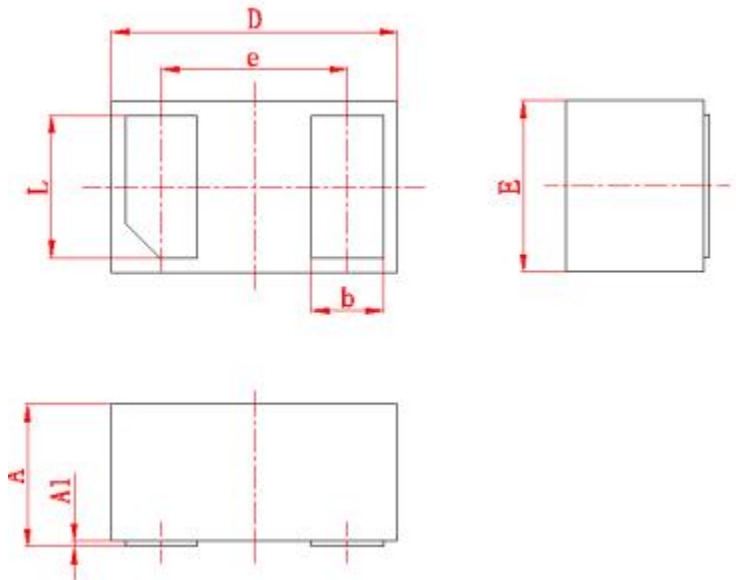


Soldering parameters

Reflow Condition		Pb-Free assembly see as bellow
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (t_s)	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

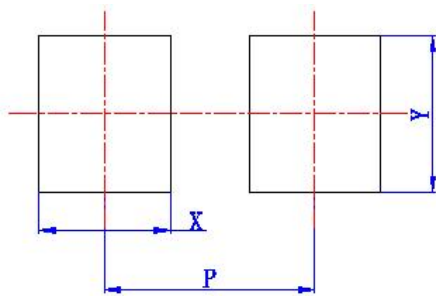


Package mechanical data



Symbol	Dimension in Millimeters	
	min	max
A	0.4	0.5
A1	0	0.05
D	0.9	1.1
E	0.55	0.65
e	(0.65)	
b	0.2	0.3
L	0.34	0.55

Suggested Land Pattern



Symbol	Dimension in Millimeters
	typ
X	(0.5)
Y	(0.7)
P	(0.8)