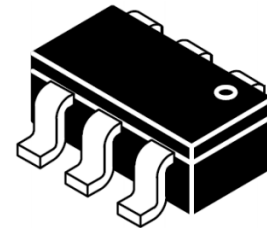


Features

- 76 Watts Peak Pulse Power per Line ($t_p=8/20 \mu s$)
- Protects Five I/O High Speed Lines
- Low Clamping Voltage
- RoHS Compliant
- IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 10kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50 μs)
- IEC61000-4-5 (LIGHTING) 3.8A (8/20 μs)

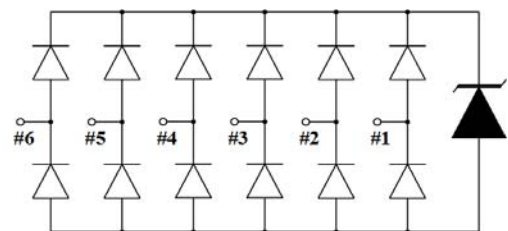
Dimensions SOT-26



Applications

- Microprocessor based equipment
- USD 3.0 High Speed Lines
- HDMI 2.0 Protection
- Notebooks, Desktops, and Servers
- MDDI Ports
- PCI Express

Pin Configuration



Mechanical Characteristics

- SOT-26 Package
- Molding Compound Flammability Rating : UL 94V-0
- Weight 14 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	76	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 15	Kv
ESD per IEC 61000-4-2 (Contact)		± 10	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

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

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
ULC0506DT6	UR6	5	6	1	11.5	20	3.8	0.1	0.35

TYPIC CHARACTERISTICS

Figure 1. 8 x 20 μ s Waveform

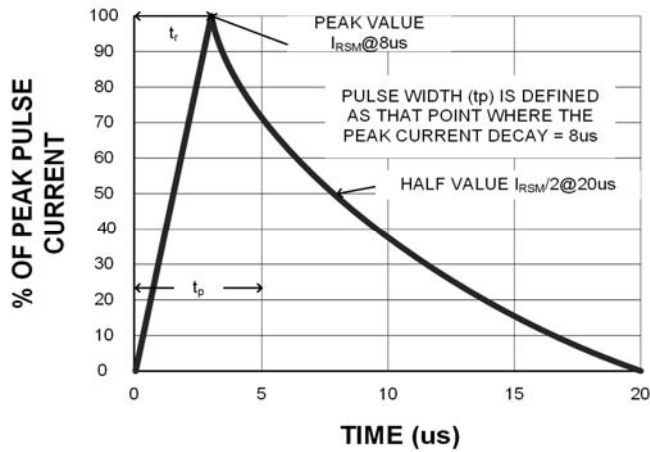


Figure 2. Power Derating Curve

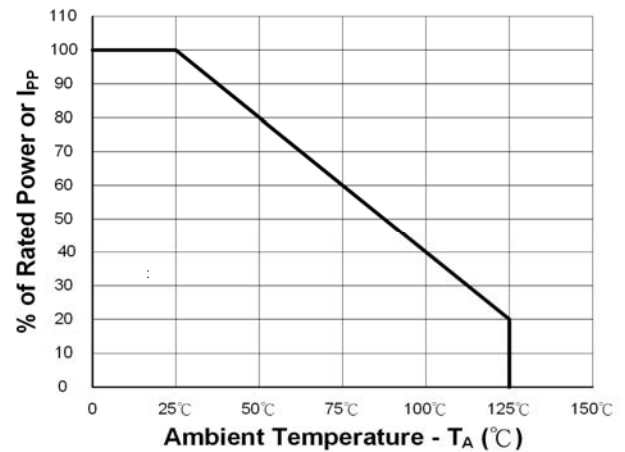
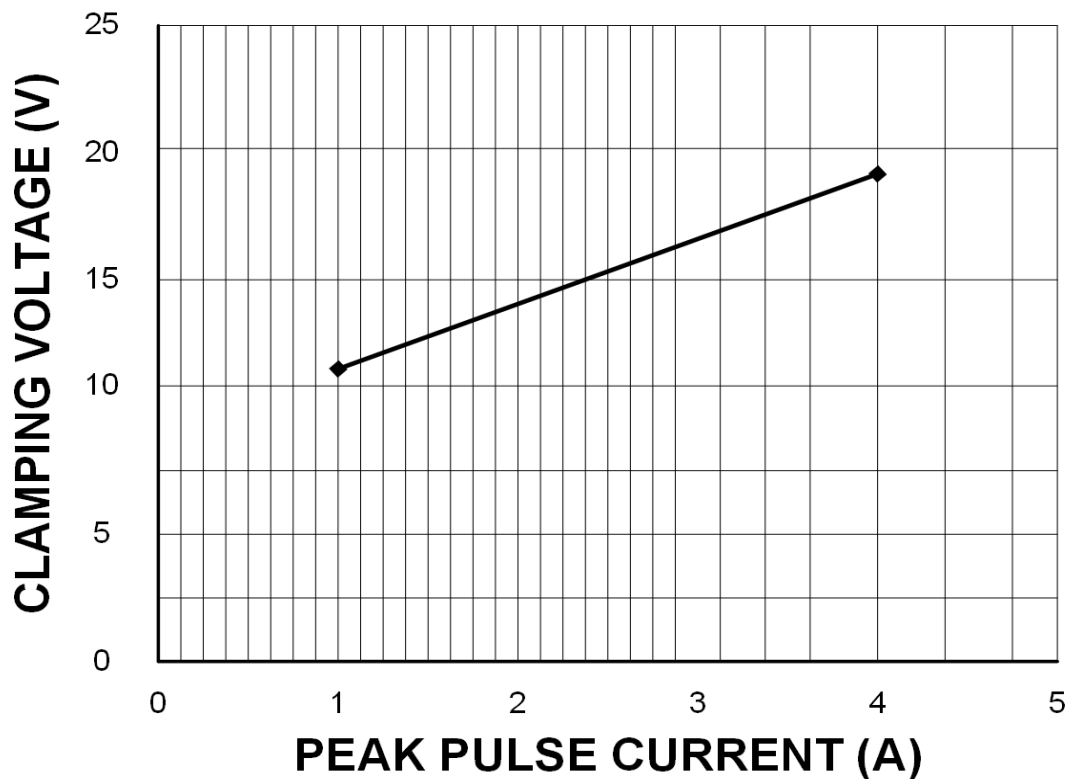
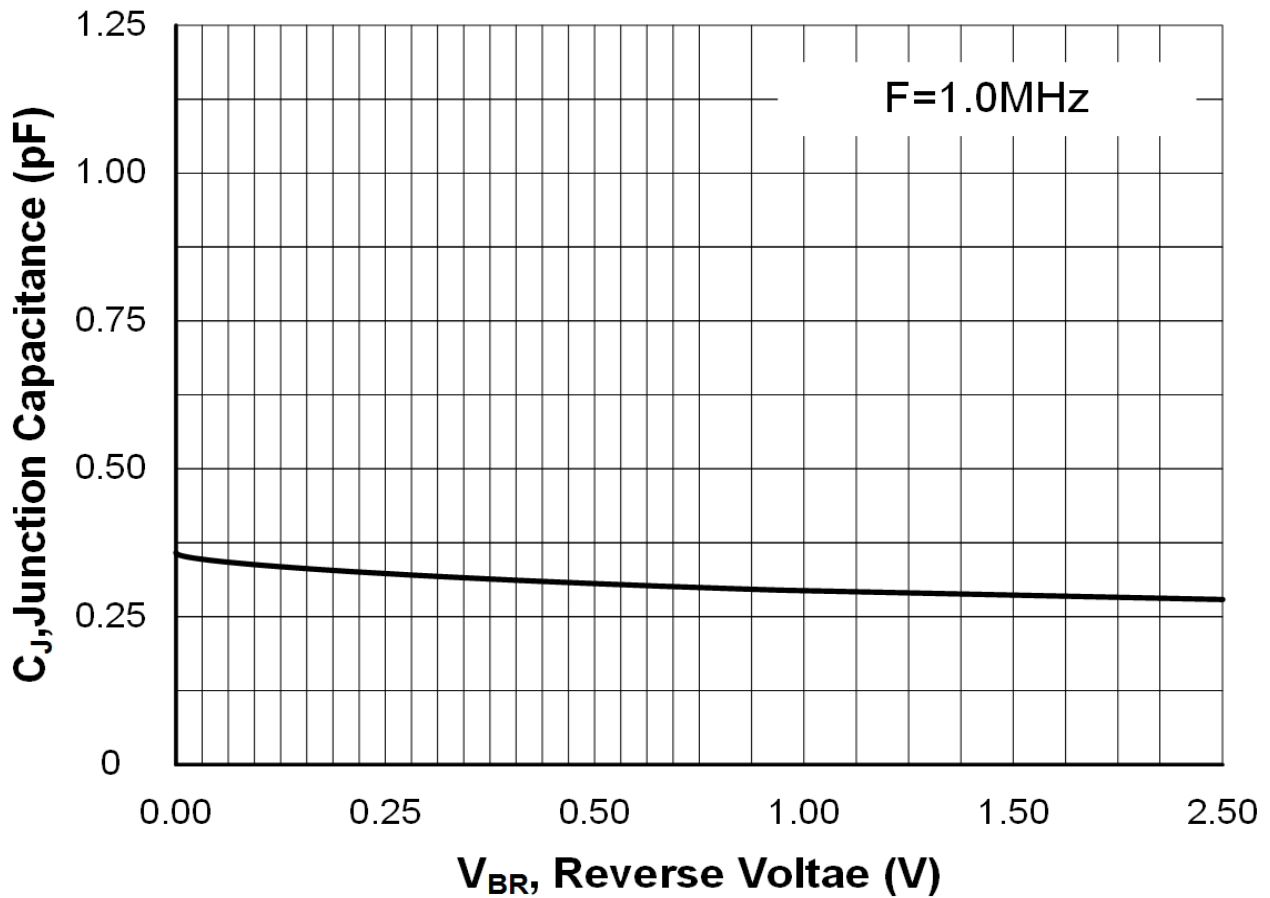


Figure 3. Clamping Voltage vs. Peak Pulse Current ($t_p=8/20 \mu$ s)

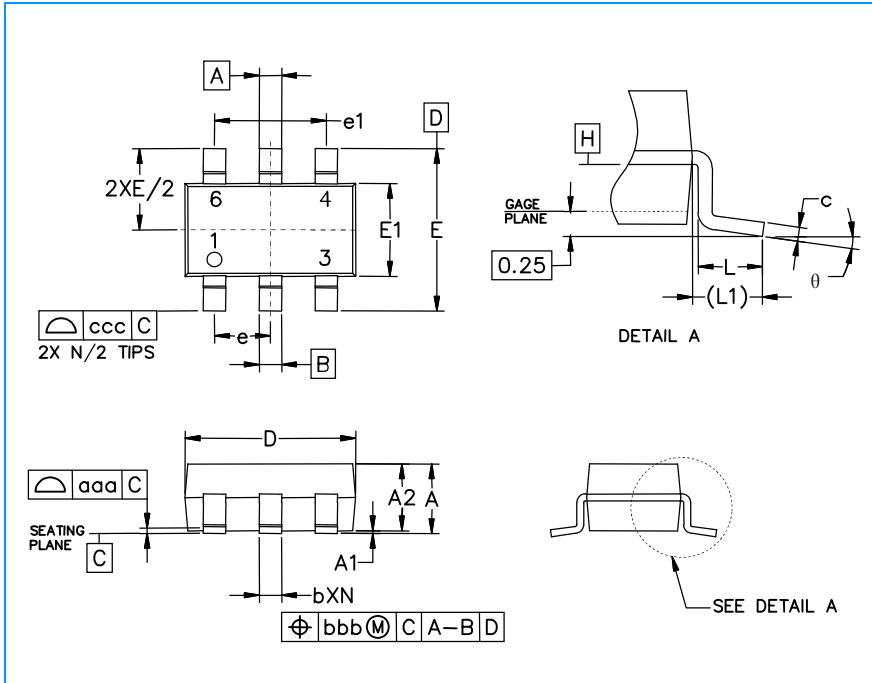


TYPIC CHARACTERISTICS

Figure 4. Typic Capacitance vs. Reverse Voltage

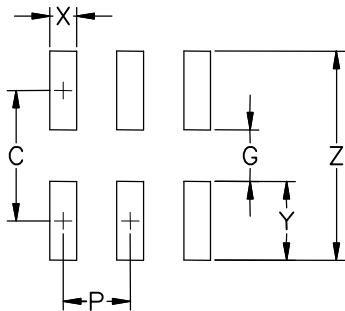


SOT-26 Package Outline & Dimensions



Symbol	Inches			Millimeters		
	Min.	Nom.	Max.	Min.	Nom.	Max.
A	0.035	-	0.057	0.90	-	1.45
A1	0.000	-	0.006	0.00	-	0.15
A2	0.035	0.045	0.051	0.90	1.15	1.30
b	0.010	-	0.020	0.25	-	0.50
c	0.003	-	0.009	0.08	-	0.22
D	0.110	0.114	0.122	2.80	2.90	3.10
E1	0.060	0.063	0.069	1.50	1.60	1.75
E	0.110 BSC			2.80 BSC		
e	0.037 BSC			0.95 BSC		
e1	0.075 BSC			1.90 BSC		
L	0.012	0.018	0.024	0.30	0.45	0.60
L1	(0.024)			(0.60)		
θ	0°	-	10°	0°	-	10°
aaa	0.004			0.10		
bbb	0.008			0.20		
ccc	0.008			0.20		

Soldering Footprint



Symbol	Inches	Millimeters
C	(0.098)	(2.50)
G	0.055	1.40
P	0.037	0.95
X	0.024	0.60
Y	0.043	1.10
Z	0.141	3.60