

Features

- Ultra low leakage: nA level
- Operating voltage: 36V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 7A (8/20 μs)
- RoHS Compliant

Mechanical Characteristics

- Package: SOT323
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0
- Shipping Qty : 3000pcs/7Inch Tape & Reel

Applications

- CAN Bus Protection
- Automotive Appllcatrons

Dimensions and Pin Configuration



Marking:C06

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	400	W
Peak Pulse Current (8/20μs)	Ipp	7	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			36	V	
Breakdown Voltage	VBR	38			V	IT = 1mA
Reverse Leakage Current	IR			0.5	uA	VRWM = 36V
Clamping Voltage	VC		45		V	Ipp = 1A (8 x 20Us pulse)
Clamping Voltage	VC			60	pF	Ipp = 7A (8 x 20Us pulse)
Junction Capacitance	CJ		25	50	pF	VR = 0V, f = 1MHz IO to GND
Junction Capacitance	CJ		12	18	pF	VR = 0V, f = 1MHz IO to IO

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

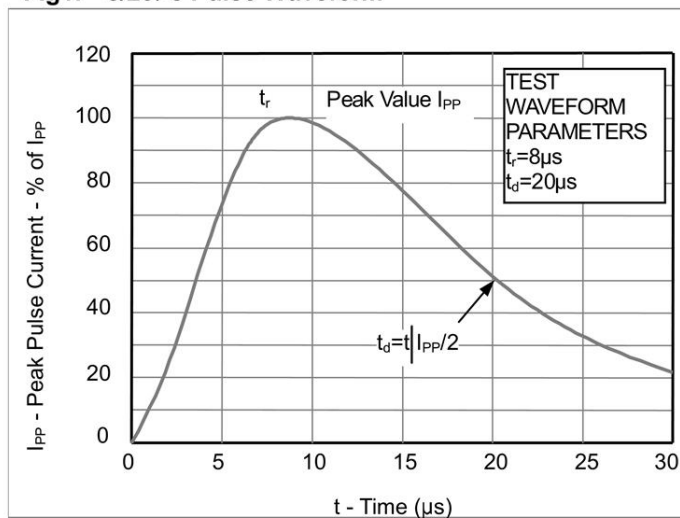


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

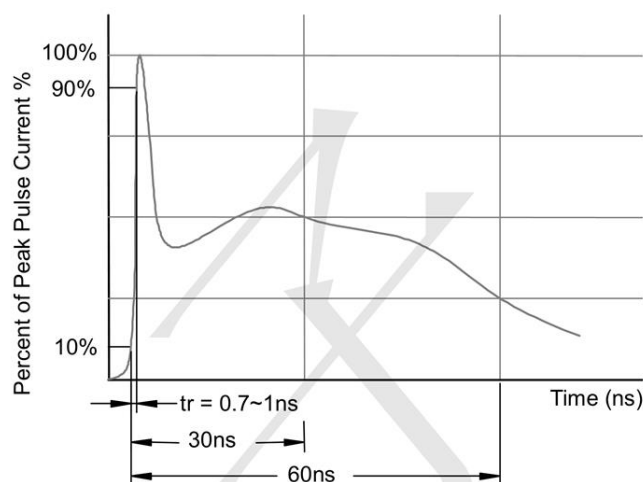
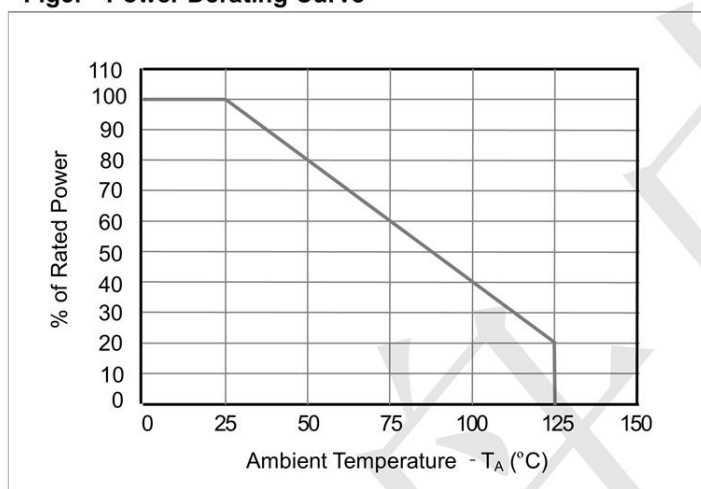
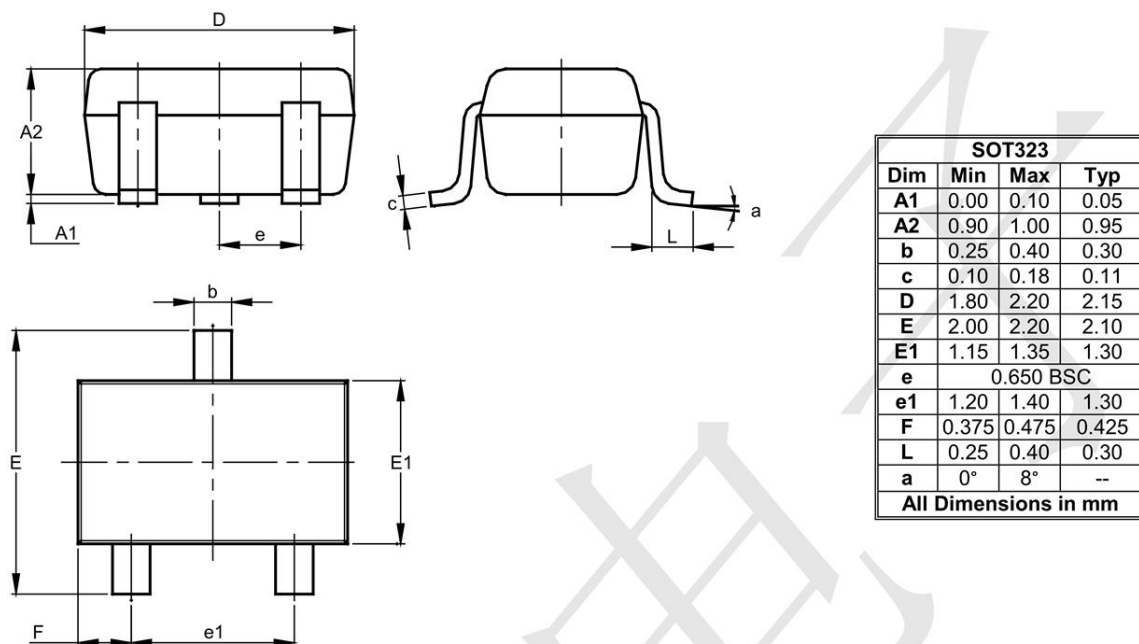


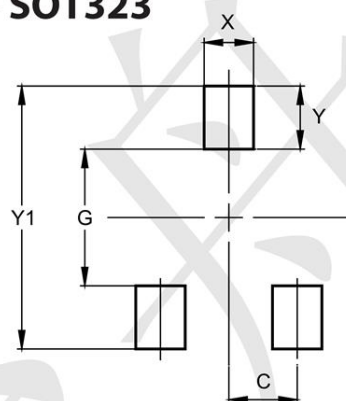
Fig3. Power Derating Curve



Outline Drawing - SOT323(SC70-3)



Land Pattern - SOT323



Dimensions	Value (in mm)
C	0.650
G	1.300
X	0.470
Y	0.600
Y1	2.500