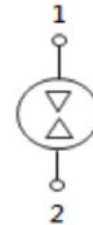
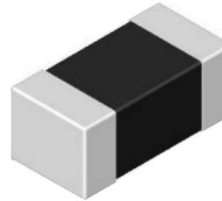


Features

- Small package, 0.6x0.3x0.25mm
- Ultra low capacitance
- Operating voltage: 6V
- RoHS Compliant
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±25kv
 - Contact discharge: ±15kv



0201

Schematic Diagram

Performance Characteristics

Parameter	Working Voltage	Typical ESD Trigger Voltage	Typical ESD Clamping Voltage at 60ns	Leakage Current (at Initial State)	Leakage Current (after ESD Test)	Cap. Value at 1MHz (typ)	Cap. Value at 1MHz (max)
Symbol	$V_{DC}(max.)$	$V_{trigger}(typ.)$	$V_C(typ.)$	I_{LDC}	I_{LDCA}	C	C (max.)
Unit	V	V	V	uA	uA	pF	pF
Value	6	300	30	<0.1	<1.0	0.05	0.08

Reference Data

Parameter	Symbol	Value	Units
Response Time	T_{rise}	<0.5	ns
Operation Ambient Temperature	T_{OPT}	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Complies With Standardd	ESD	IEC61000-4-2 Level 4 ±15KV Contact, ±25KV Air	-
Body	-	Glass Fiber Epoxy Resin	-
End Termination	-	Ag/Ni/Sn	-

Notes:

1. The ESD clamping voltage was measured by IEC61000-4-2 level 4 and ±15KV contact, ±25KV air.
2. The leakage current was measured at V_{DC} .
3. The maximum ESD clamping voltage at 30ns can be within 100V.
4. The components shall be employed within 1 year, in the nitrogen condition.

ESD Testing Circuit and Test Results

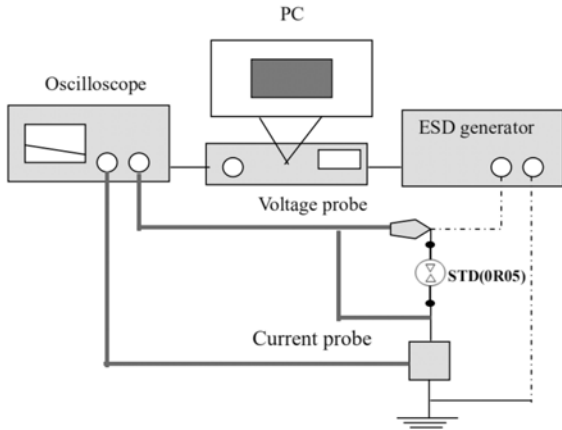


Figure 1. ESD testing circuit

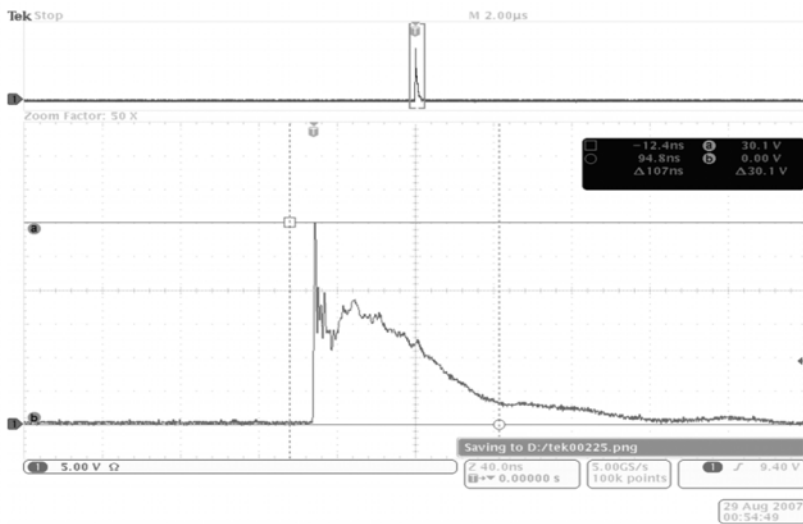


Figure 2. ESD testing circuit (without ESD protection sample, Test with high voltage probe of attenuation factor ×250)

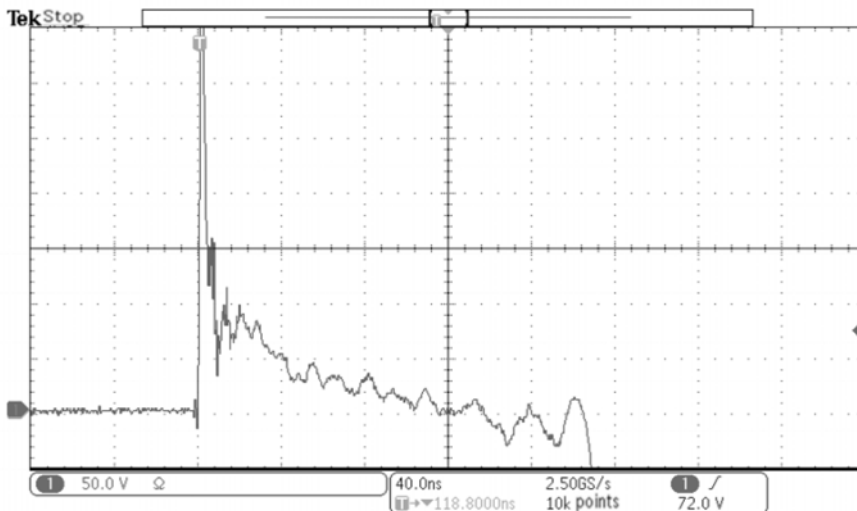


Figure 3. ESD testing circuit (with ESD protection sample)

Insertion Loss and Eye Pattern (20Gbps) Testing Results

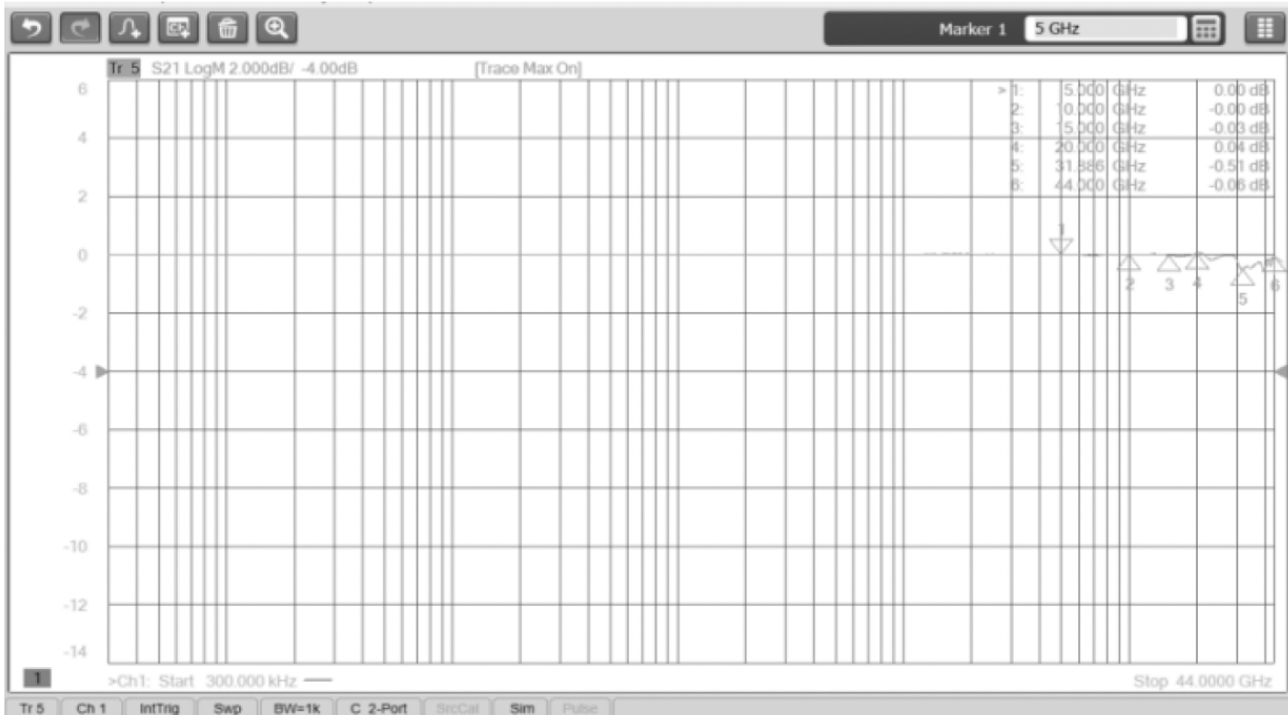


Figure 4. Insertion loss

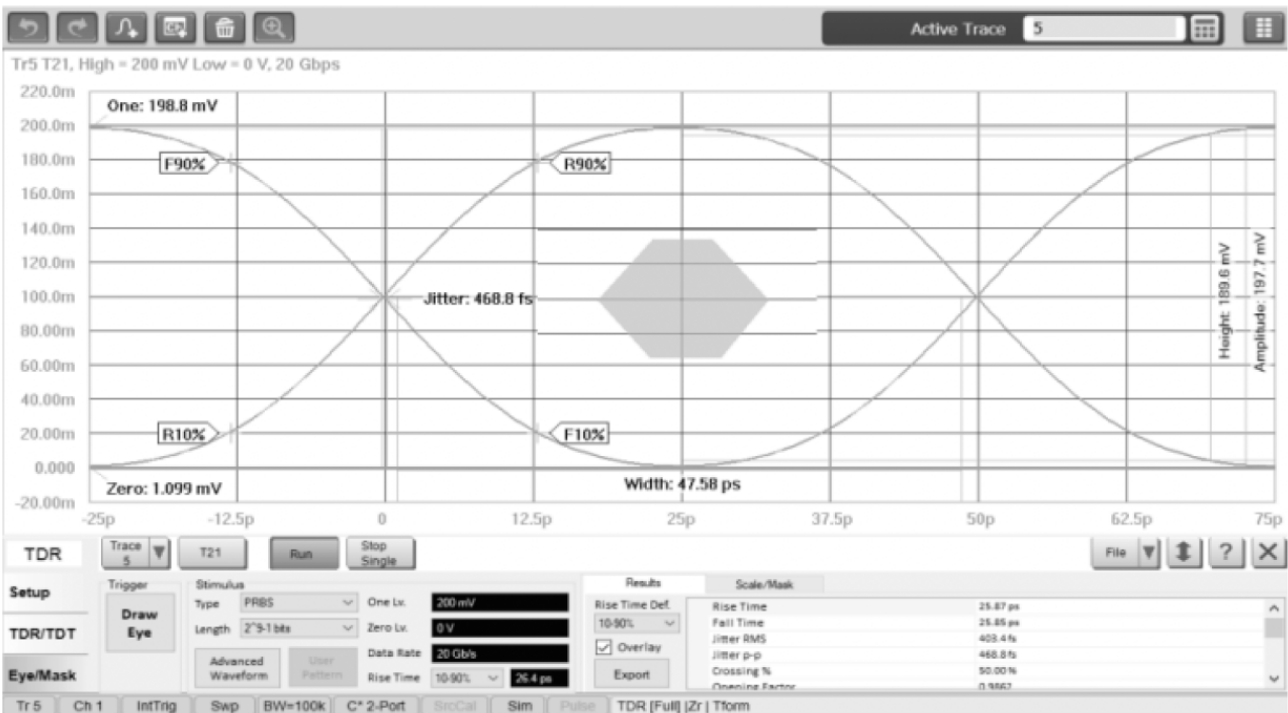
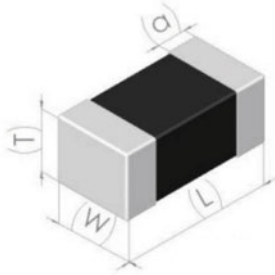


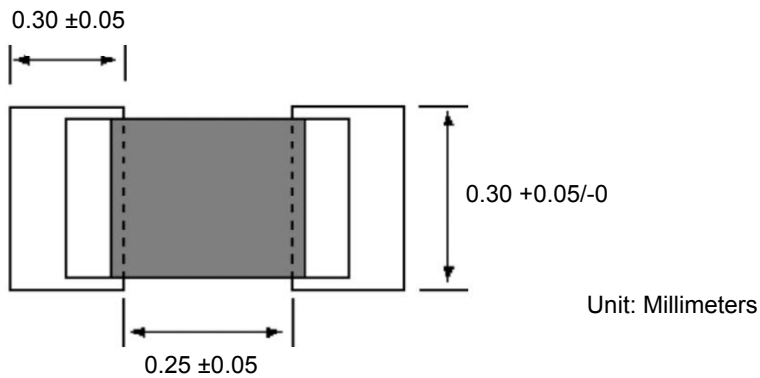
Figure 5. Eye pattern

Package Outline Dimensions (0201)



Dimensions	Spec. in Millimeters
Length (L)	0.60±0.05
Width (W)	0.30±0.05
Thickness (T)	0.25±0.05
Termination (a)	0.15±0.05

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSECA6B0005	0201	No Marking	Tape / Reel	15,000pcs / Reel