P1202-4

EFT/Burst Magnetic Field Source

Short description

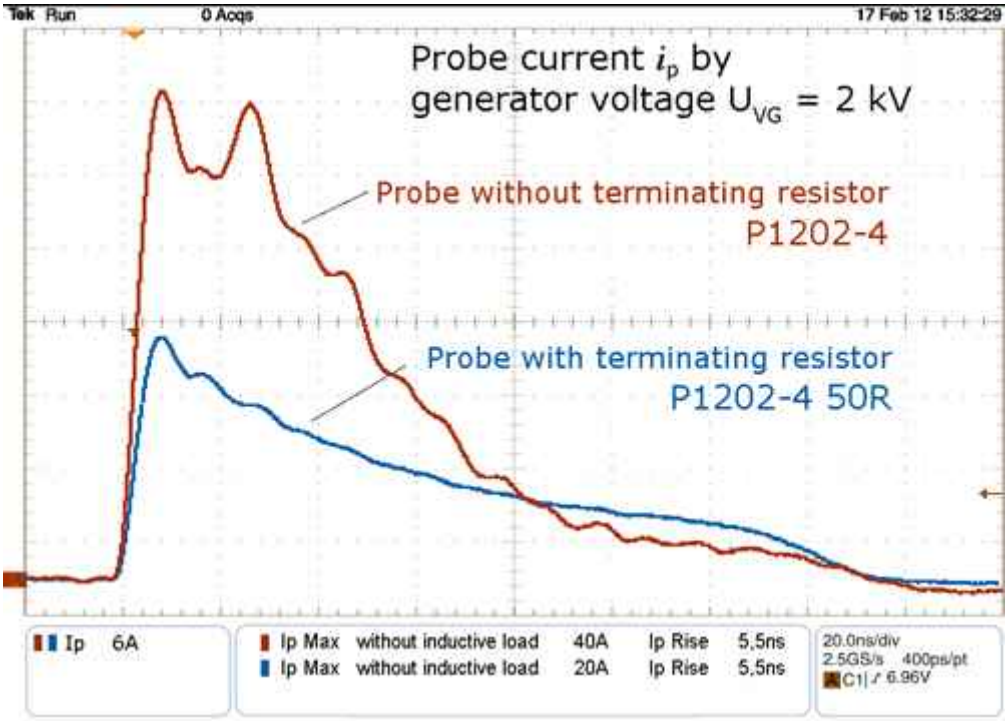
The EFT/Burst magnetic field source is used to determine the IC immunity against the coupling of magnetic EFT field pulses. It is continuously rotatable through 360° and allows the detection of sensitive conductor loops within the IC and detection of conductor loops that lead out of the IC via the pins. It does not have a terminating resistor and operates under short-circuit termination.

The P1202-4 field source is powered by an EFT/Burst generator (IEC 61000-4-4). It does not synchronize with the EFT/Burst generator. Therefore, reflection processes result in the current flow. Such reflection processes occur during practical device testings according to the standard ICE 61000-4-4 and are reproduced by P1202-4. In the field source conductor without a terminating resistor, the flowing current is twice that of the field source with a terminating resistor (P1202-4 50R).
The P1202-4 field source is arranged at a defined distance above the IC with the help of a spacer ring.
It has two connections. A Fischer socket (D103A023) for the connection to an EFT/Burst generator and a SMB measurement output for the connection of an oscilloscope for monitoring the EFT current. Delivery includes the HV FI-FI 1m RF cable (Fischer connector-Fischer connector). On request, the RF cable with the connection Fischer socket-SHV socket (HV FI-SHV 1m) can be ordered.

Technical parameters

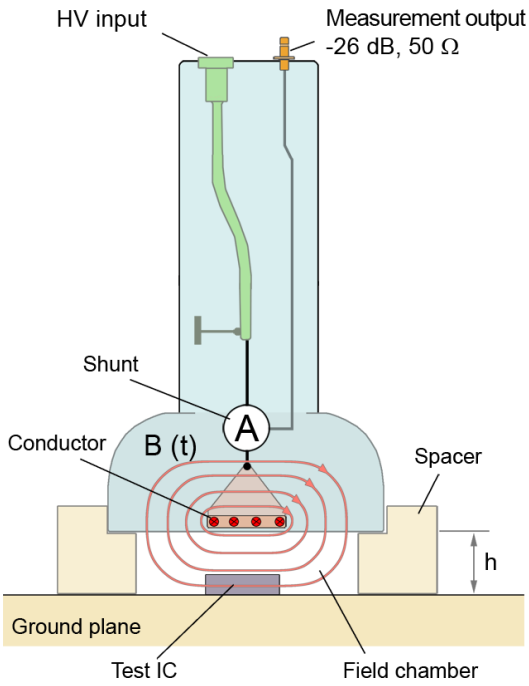
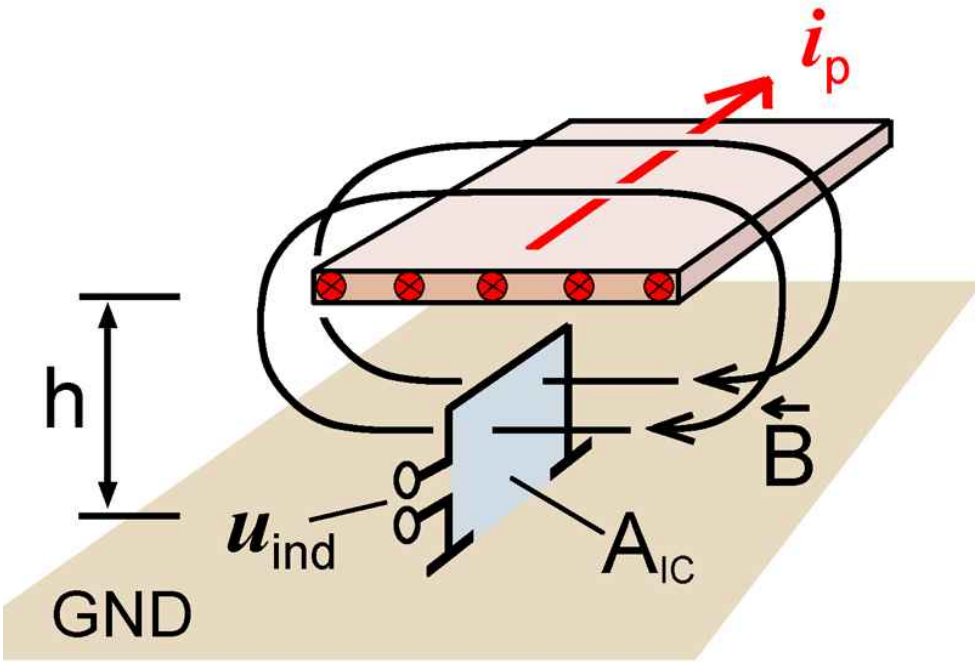
Input resistance	0.1 Ω
Pulse parameter	
Shape	5 / 50 ns
Voltage	max ±8 kV
Ammeter /current probe	
Measurement output	50 Ω, SMB
Shunt	0.1 Ω
Current correction factor R	-26 dBΩ
Connector - input	50 Ω Fischer (D103A023)
Sizes (L x W x H)	(180 x 96 x 96) mm

Pulse shape (measured)



Design, view 1

P1202-4 EFT/burst H-field source



Design, view 2