

# 3 x 5 mm BC422 Tests

Single (100 mm x 5 mm x 2 mm) BC422 + S13360-3050PE

Run #	HV	CFD_th	Efficiency	$\sigma_{T(L-R)}$	$\sigma_{T([L+R]/2)}$
6031	55 V	-20 mV	99.5 % $\pm$ 0.1 %	156 ps	78 ps

Al. Coated (100 mm x 5 mm x 2 mm) BC422 + S13360-3050PE

Run #	HV	CFD_th	Efficiency	$\sigma_{T(L-R)}$	$\sigma_{T([L+R]/2)}$
Normalized*	55 V	-20 mV		210 ps	105 ps

\*Normalized to the factor we got for EJ204 (171 ps) and Al. coated EJ204 (230 ps)

3 x (100 mm x 5 mm x 2mm) BC422 + S13360-3050PE  
with 12 micron air gap

Run #	HV	CFD_th	Efficiency	$\sigma_{T(L-R)}$	$\sigma_{T([L+R]/2)}$
6057	55 V	-5 mV	99.5 % $\pm$ 0.1 %	185 ps	93 ps
6058	55 V	-10 mV	99.5 % $\pm$ 0.1 %	184 ps	92 ps
6059	55 V	-15 mV	99.3 % $\pm$ 0.1 %	182 ps	91 ps
6060	55 V	-20 mV	98.8 % $\pm$ 0.1 %	176 ps	88 ps
6061	55 V	-25 mV	97.7 % $\pm$ 0.1 %	174 ps	87 ps
6062	55 V	-30 mV	95.1 % $\pm$ 0.1 %	178 ps	89 ps
6065	55 V	-35 mV	90.4 % $\pm$ 0.1 %	173 ps	87 ps
6064	55 V	-40 mV	82.5 % $\pm$ 0.1 %	179 ps	90 ps

3 x (100 mm x 5 mm x 2mm) BC422 + S13360-3050PE  
with 6 micron air gap + 6 micron aluminized maylar

Run #	HV	CFD_th	Efficiency	$\sigma_{T(L-R)}$	$\sigma_{T([L+R]/2)}$
6118	55 V	-5 mV	98.9 % $\pm$ 0.1 %	165 ps	83 ps
6124	55 V	-10 mV	98.8 % $\pm$ 0.1 %	156 ps	78 ps
6120	55 V	-15 mV	98.8 % $\pm$ 0.1 %	156 ps	78 ps
6121	55 V	-20 mV	98.6 % $\pm$ 0.1 %	152 ps	76 ps
6122	55 V	-25 mV	98.3 % $\pm$ 0.1 %	151 ps	76 ps
6123	55 V	-30 mV	97.1 % $\pm$ 0.1 %	151 ps	76 ps
6128	56 V	-5 mV	98.7 % $\pm$ 0.1 %	154 ps	77 ps
6125	56 V	-10 mV	98.7 % $\pm$ 0.1 %	148 ps	74 ps
6126	56 V	-15 mV	99.0 % $\pm$ 0.1 %	146 ps	73 ps
6127	56 V	-20 mV	98.8 % $\pm$ 0.1 %	152 ps	76 ps

- All measurements are done with 46-47 kHz in 2x2 mm<sup>2</sup>; CFD delay = 2 ns