

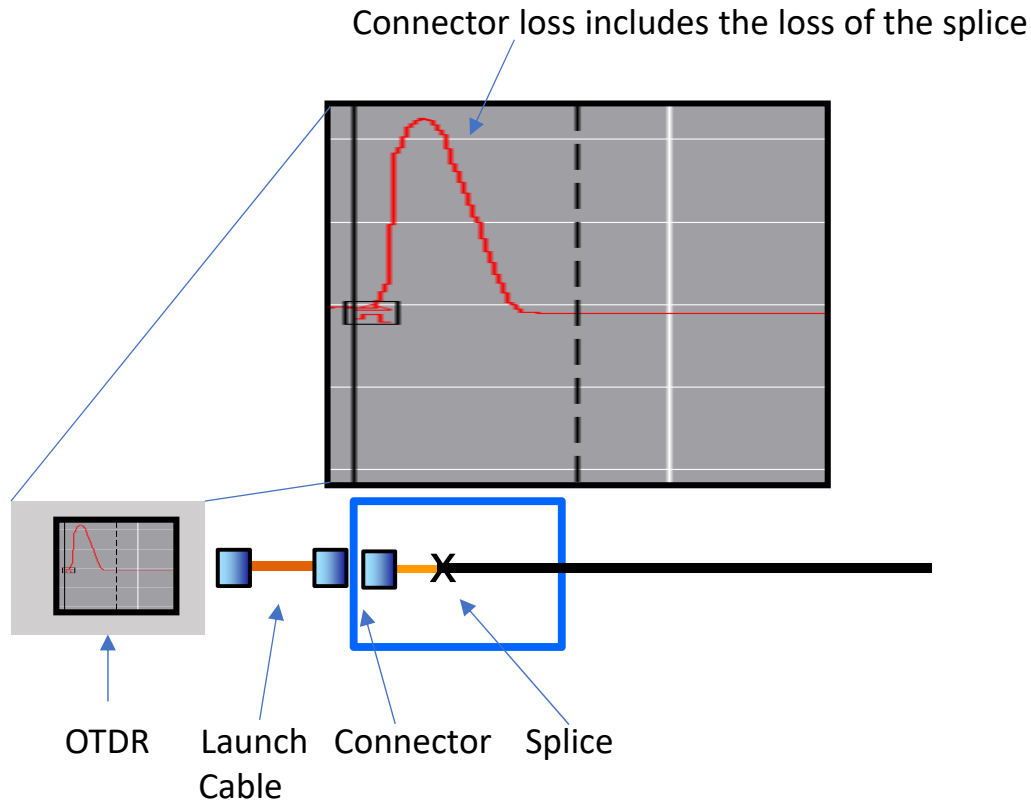
Connector Loss Measurement with an OTDR

Singlemode	Insertion Loss (dB)		Reflectance (-dB)	
	typical	max	typical	max
FCPC	0.35	0.55	40	35
SCPC	"	"	"	"
STPC	"	"	"	"
FCSPC	"	"	45	40
STSPC	"	"	"	"
FCUPC	"	"	50	45
STUPC	"	"	"	"
FCAPC	"	"	60	50
SCAPC	"	"	"	"

Rec. ITU-T L.404 (08/2017)

Multimode	Insertion Loss (dB)		Reflectance (-dB)	
	typical	max	typical	max
FCPC	0.6	1	30	20
SCPC	"	"	"	"
STPC	"	"	30	25
FCSPC	"	"	35	30
STSPC	"	"	35	30

OTDR Measuring Guidance



Using an OTDR to measure a system connector must be done using a launch cable between the OTDR and the connector under test. Usually the connector comes as a pigtail with a bare fibre end. This pigtail fibre is cut to a specific length suitable for the termination joint and is 1 metre or less. The fibre end of the pigtail is spliced to fibre from the main route cable. Any OTDR loss measurement made of this connector will show the combined loss of the connector and the splice. For singlemode connectors at worst case, this is 0.55dB for the connector and 0.2dB for the splice = 0.75dB but if the pigtail fibre and the route cable fibre are dissimilar e.g. from different manufacturers the loss may appear to be greater than this. If this occurs the test should be made in both directions and the average loss calculated.