EPPL COMPONENT

Originator: Philippe FELLON

Company: UMS

Status: CLOSED

Accepted: 2015-07-03

EPPL Part:	2		
Group:	MICROCIRCUITS	Subgroup:	MICROWAVE MONOLITIC INTEGRATED CIRCUITS (MMIC)
Part type:	PPH25		
Description:	0.25 µm Power P-HEMT technology Proccess: 0.25µm pseudomorphic HEMT (AlGaAs/InGaAs/AlGaAs/GaAs) with double gate recess Technology suitable for power switch/attenuator and power amplifier up to 35GHz		
Detail spec:	2269010, 2269010		
Package:	N/A		
Manufacturer:	UMS		

APPROVAL STATUS

Qualification:	Others
Other:	ESCC evaluation in accordance to 2269010 completed in December 2014
Highest screening level (MIL):	
Evaluation programmes or other approvals:	Space evaluation final report (NE_10S_PPH25_Space_Evaluation_report_V2)
Former space usage:	Technology used by Thales Alenia Space for COSMO programme

PREVIOUS PROCUREMENT AND TEST DATA

Test data (Evaluation, Lot acceptance, DPA, MIL QCI/TCI, ...):	Etude de la fiabilité sous contrainte RFde la filière PPH25 (CNES study) NE.32S.04511 Internal PPH25 re-qualification 2008 (NE_32S_04651)

RADIATION HARDNESS DATA

Total dose effects:	
Displacement damage:	
Single event effects (SEL/SEU/SET/SEFI/SEB/SEGR/others):	SEE Radiation was tested on PPH25X-10 and the process is fully comparable to PPH25, therefore the conclusion for

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SEE is applicable to PPH25.
PPH25X-10 was tested in DC+RF up to 8dB of Gain Compression: No evidence of sensitivity to Heavy Ions (ESA STUDY : SEE TESTING OF EUROPEAN GaAs TECHNOLOGIES Contract No. 4000102424/11/NL/CP)

REMARKS