

TRANSISTORS, POWER, MOSFET, N-CHANNEL, BASED ON TYPE BUY **CS***				319C
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5000 Detail ESCC	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	Aug 2012
Remarks These devices have a TID tested capability of 100 kRad (Si) SEE tested : LET (MeV-cm ² /mg) 56 @ V _{GS} = -10V, V _{DS} = 250V SOA and SE SOA derating graphs are incorporated in the Detail Specifications.				
5205/026, 5205/027, 5205/028, 5205/030				
Qualified range: 5205/026 — variant 01R 5205/027 — variant 01R 5205/028 — variant 01R 5205/030 — variants 01R, 02R, 03R				

TRANSISTORS, POWER, MOSFET, N-CHANNEL, RADHARD BASED ON TYPE BUY 15CS				339A
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5000 Detail ESCC 5205/031	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	May 2016
Remarks These devices have a TID tested capability of 100 kRad (Si) SEE tested : LET (MeV-cm ² /mg) 56 @ V _{GS} = -10V, V _{DS} = 250V SOA and SE SOA derating graphs are incorporated in the Detail Specifications.				
Qualified range: All Variants are qualified. Package:SMD0.5, SMD2, TO-254AA, TO-257AA Maximum ratings:				
r _{DS(ON)} (mΩ) @ 25 °C		150		
I _{DS} (A)		23		
V _{DS} (V) max.		150		
V _{GS} (V) max.		±20		
P _{tot} (W)		75		
R _{th(j-c)} (°C/W)		1.66		
Operating Temperature Range (°C): Top = - 55 to +150				

6.12.5 RF/Microwave, NPN, Low Power, Low Noise

TRANSISTORS, MICROWAVE, SMALL SIGNAL, BIPOLAR, BASED ON TYPE BFY 193				230H
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5010 Detail ESCC 5611/006	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	Jun 1996
		Remarks		
Qualified range:				
Variants 01 to 08				
Characteristics for BFY 193:				
V _{CEO} (V) max.		12		
V _{CBO} (V) max.		20		
h _{FE} min/max.		50/175	@ VCE = 8.0 V, IC = 30mA	
NF (dB) max.	@ 2 GHz	2.9	@ VCE = 5.0 V, IC = 15mA	
MAG/MSG (dB) min.	@ 2 GHz	12.5	@ VCE = 5.0 V, IC = 40mA	
f _T (GHz) min.	@ 500 MHz	6.5	@ VCE = 5.0 V, IC = 40mA	
Package: “ Micro-X1”				
Total Power Dissipation (P _{tot}) = 580 mW				
Operating Temperature Range (°C): Top = - 65 to +200				

TRANSISTORS, MICROWAVE, SMALL SIGNAL, BIPOLAR, BASED ON TYPE BFY 450				245H
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5010 Detail ESCC 5611/008	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	Jun 1997
		Remarks		
Qualified range: Variants 01, 02 and 03 are qualified. Characteristics for BFY 450:				
V _{CEO} (V) max.		4.5		
V _{CBO} (V) max.		15		
I _C (mA) max.		100		
I _B (mA) max.		10		
h _{FE} min/max.		50/150		@ VCE = 1.0 V, IC = 20mA
NF (dB) max.	@ 1.8 GHz	2.0		@ VCE = 2.0 V, IC = 10mA
f _T (GHz) min.	@ 1.0 GHz	18		@ VCE = 3.0 V, IC = 90mA
Package: “ Micro-X1” Total Power Dissipation (Ptot) = 450 mW Operating Temperature Range (°C): Top = - 65 to +175				

TRANSISTORS, MICROWAVE, SMALL SIGNAL, BIPOLAR, BASED ON TYPES BFY 640, 640B, 650B and 740B				322C
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5010 Detail ESCC	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	Jun 1997
		Remarks This certificate, from its issue B, release in May 2016, includes in its scope of qualification some devices previously listed in the QPL under certificates No. 320 and 321, which are no longer maintained.		
5611/009, 5611/010, 5611/011				
Qualified range: 5611/009: variants 01, 02, 03 5611/010: variants 01, 02, 03, 04 5611/011: variant 01				

6.12.6 Microwave, Gallium Arsenide

TRANSISTORS, HIGH ELECTRON MOBILITY, GALLIUM ARSENIDE, MICROWAVE, LOW NOISE, SMALL SIGNAL, BASED ON TYPE CFY 67				213H											
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date											
Generic ESCC 5010 Detail ESCC 5613/004	Infineon Technologies AG Neubiberg Germany	Qualification	DLR	Apr 1994											
Remarks															
Qualified range: All variants are qualified Characteristics (@ 12 GHz): <table><tr><td colspan="2"></td><td>NFmin. (dB)</td><td>Ga (dB)</td></tr><tr><td rowspan="2">5613/004</td><td>variants 1 & 3</td><td>0.8</td><td>11</td></tr><tr><td>Variants 2 & 4</td><td>1.0</td><td>10.5</td></tr></table> Package: Micro-X Total Power Dissipation (P _{tot}) = 200 mW derated from +31 °C T _{amb} Operating Temperature Range (°C): T _{stg} = - 65 to +150							NFmin. (dB)	Ga (dB)	5613/004	variants 1 & 3	0.8	11	Variants 2 & 4	1.0	10.5
		NFmin. (dB)	Ga (dB)												
5613/004	variants 1 & 3	0.8	11												
	Variants 2 & 4	1.0	10.5												