

6.4 DIODES (04)

6.4.1 Bipolar PN

DIODES, POWER, BIPOLAR (PN) BASED ON TYPES BYV, BYW AND STTH									369Arev1
Procurement Specifications	Manufacturer		Nature of Approval	Supervising Authority		Initial Qualification Date			
Generic ESCC 5000 Detail ESCC	STMicroelectronics Rennes France		Qualification	CNES		Nov 2020 Initial qualification date of certificates merged into 369: Cert 274: 08/2003 Cert 297: 11/2009 Cert 311: 05/2011			
			Remark:						
5101/026, 5101/027, 5101/013, 5101/014, 5103/029, 5103/031, 5103/032, 5103/033									
Qualified range:									
ESCC component No.	Variant	Type	V _{RWM} (V)	I _R (µA) @ V _{RWM}	I _{FSM} (A)	I _{FRMS} @ T _{amb} (A)	T _{jmax} (°C)	Config.	Package
5101/014	13, 14	1N5806	150	0.5	33	2.5	175	Single	LCC2A
5101/013	11, 12	1N5811	150	2	100	6	175	Single	LCC2B
5101/027	07, 08	1N6640U	50	0.04	2	0.3	175	Single	LCC2D
5101/026	07, 08	1N6642U	75	0.05	2	0.3	175	Single	LCC2D
5103/029	05	BYW81-200	200	20	250	15	150	Single	SMD.5
5103/029	07, 08	BYW81-200	200	20	500	30	150	Dual	TO254
5103/031	02, 05	BYV54-200	200	50	400	40	150	Single	TO254, TO254AA
5103/032	01, 02	STTH60400	400	20	500	60	175	Single	SMD1
5103/033	01, 02	STTH40200	200	30	300	40	175	Single	TO254AA
5103/033	03, 04	STTH60200	200	30	300	60	175	Single	SMD1

6.4.2 Schottky

DIODES, POWER, SCHOTTKY BARRIER, BASED ON TYPES 1N5819U, 1N5822U AND STPS									<u>368Arev1</u>
Procurement Specifications		Manufacturer		Nature of Approval		Supervising Authority		Initial Qualification Date	
Generic ESCC 5000 Detail ESCC		STMicroelectronics Rennes France		Qualification		CNES		Sept 2020 Initial qualification date of certificates merged into 368: Cert 272: 11/2002 Cert 302: 09/2010	
				Remarks					
5106/020, 5106/021, 5106/016, 5106/017, 5106/018, 5106/019, <u>5106/023</u> , 5106/024									
Qualified range:									
ESCC component No.	Variant	Type	V _{RRM} (V)	I _R (µA) @ V _{RRM}	I _{FSM} (A)	I _{FRMS} @T _{amb}	T _{jmax} (°C)	Config.	Package
5106/021	02, 03	1N5819U	45	20	25	1A	150	Single	LCC2B
5106/020	01, 02	1N5822U	40	80	80	3A	150	Single	LCC2B
5106/016	05, 06, 07, 11	STPS20100	100	30	250	30A per diode	175	Single or Dual diode common cathode	TO-254, SMD0.5, SMD1
5106/017	01, 02	STPS1045S	45	100	200	15A per diode	175	Single or Dual diode common cathode	SMD0.5
5106/018	02	STPS6045	45	500	300	2 x 30A	175	Dual diode common cathode	SMD1
5106/019	03, 05	STPS40100	100	30	300	2 x 20A	175	Dual diode common cathode	TO254, SMD1
5106/023	01, 05	STPS80A150	150	14	190	2 x 40A	175	Dual diode common	SMD0.5

DIODES, POWER, SCHOTTKY BARRIER, BASED ON TYPES 1N5819U, 1N5822U AND STPS								<u>368Arev1</u>	
								cathode	
5106/023	02, 06	STPS60A150	150	14	190	2 x 30A	175	Dual diode common cathode	SMD0.5
5106/023	03, 04	STPS40A150	150	14	220	2 x 20A	175	Dual diode common cathode	TO- 254AA
5106/024	02, 03	STPS40A45C	45	25	200	2 x 20A	175	Dual diode common cathode	TO- 254AA
5106/024	01	STPS80A45C	45	25	200	2 x 40A	175	Dual diode common cathode	SMD0.5
Maximum dV/dt= 10 000V/μs									