

6.4 DIODES (04)

6.4.1 Switching

DIODES, SWITCHING, BASED ON TYPE 1N6640U AND 1N6642U				311D	
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date	
Generic ESCC 5000 Detail ESCC 5101/026 5101/027	STmicroelectronics Rennes France	Qualification	CNES	May 2011	
Remarks					
Qualified range:					
Type	Variants	V <sub>BR</sub> (V)	V <sub>RWM</sub> (V)	I <sub>FSM</sub> (A)	Case
1N6640U	07, 08	75	75	2	LCC2-D
1N6642U	07, 08	100	100	2	LCC2-D
Operating Temperature Range (°C): -65 to +175					

6.4.2 Power Rectifier

DIODES, POWER RECTIFIER, BASED ON TYPES 1N5806U AND 1N5811U				<b>297E</b>		
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date		
Generic ESCC 5000 Detail ESCC 5101/013 5101/014	STmicroelectronics Rennes France	Qualification	CNES	Nov 2009		
Remarks						
Qualified range:						
ESCC	Type	Variants	VBR (V)	VRWM (V)	IFSM (A)	Case
5101/014	1N5806U	13, 14	160	150	33	LCC2-A
5101/013	1N5811U	11, 12	160	150	100	LCC2-B
Operating Temperature Range (°C): -65 to +175						

DIODES, POWER SCHOTTKY, BASED ON TYPES 1N5819U AND 1N5822U				302D																			
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date																			
Generic ESCC 5000	STmicroelectronics Rennes France	Qualification	CNES	Sep 2010																			
Detail ESCC 5106/020 5106/021		Remarks																					
<p>Qualified range:</p> <p>Variants 01 and 02 of 5106/020 and Variants 02 and 03 of 5106/021 are qualified</p> <table border="1"> <thead> <tr> <th>Type</th> <th>VRWM (V)</th> <th>dV/dt (V/μs)</th> <th>IR (μA) @VR=40</th> <th>IFSM (A)</th> <th>IO (A) @ Tamb</th> </tr> </thead> <tbody> <tr> <td>1N5819U</td> <td>40</td> <td>10 000</td> <td>15 (DC)</td> <td>25</td> <td>1</td> </tr> <tr> <td>1N5822U</td> <td>40</td> <td>10 000</td> <td>80 (pulse)</td> <td>80</td> <td>3</td> </tr> </tbody> </table> <p>Package Type: LCC2-B</p> <p>Operating Temperature Range (°C): -65 to +150</p>						Type	VRWM (V)	dV/dt (V/μs)	IR (μA) @VR=40	IFSM (A)	IO (A) @ Tamb	1N5819U	40	10 000	15 (DC)	25	1	1N5822U	40	10 000	80 (pulse)	80	3
Type	VRWM (V)	dV/dt (V/μs)	IR (μA) @VR=40	IFSM (A)	IO (A) @ Tamb																		
1N5819U	40	10 000	15 (DC)	25	1																		
1N5822U	40	10 000	80 (pulse)	80	3																		

DIODES, POWER, SCHOTTKY BARRIER, BASED ON TYPE STPS20100				272Hrev2
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 5000 Detail ESCC	STmicroelectronics Rennes France	Qualification	CNES	Nov 2002
Remarks				
5106/016, 5106/017, 5106/018, 5106/019, 5106/023, 5106/024				
Qualified range:				
ESCC Comp. No.	Variants	Package types	Based on type	
5106/016	05, 06, 07, 11	TO-254, SMD0.5, SMD1	STPS20100	
5106/017	01, 02	SMD0.5	STPS1045S	
5106/018	02	SMD1	STPS6045	
5106/019	03, 05	TO254, SMD1	STPS40100	
5106/023	01,02, 03, 04	SMD0.5, TO-254AA	STPS60A150 STPS80A150 STPS40A150	
5106/024	01, 02, 03	SMD0.5, TO-254AA	STPS40A45C STPS80A45C	
Maximum Ratings for 5106/016				
V <sub>RRM</sub>	100 V			
I <sub>o</sub>	2 x 20 A			
dV/dt	10000 V/μs			
T <sub>j</sub>	+ 175 °C			

<p>DIODES, SILICON, POWER RECTIFIER, HIGH EFFICIENCY, FAST RECOVERY, BASED ON TYPES BYW81 AND BYV54</p>				<p><b>274Grev1</b></p>
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
<p>Generic ESCC 5000</p>	<p>STmicroelectronics Rennes France</p>	<p>Qualification</p>	<p>CNES</p>	<p>Aug 2003</p>
<p>Detail ESCC 5103/029 5103/031 5103/032 5103/033</p>		<p>Remarks</p>		
<p>Qualified range:</p> <p>5103/029 variants 05, 07 and 08 are qualified (type BYW81-200), package types TO254 and SMD0.5</p> <p>5103/031 variant 02 to 05 are qualified (type BYV54-200), package types TO254 and TO254AA</p> <p>5103/032 variant 01 is qualified (type STTH60400), package type SMD1</p> <p>5103/033 variants 01, 02 and 03 are qualified (types STTH40200 and STTH60200), package types TO-254AA and SMD1</p>				