



Standard Recovery Rectifiers With ESD Capability and TMBS[®] Rectifiers in SMPA (DO-221BC) Package



STANDARD RECOVERY RECTIFIERS WITH ESD CAPABILITY

KEY PRODUCT BENEFITS

- Very low profile height of 0.95 mm (typical)
- Oxide planar chip technology
- ESD capability
 - Provide class H3B (> 8 kV) performance based on the AEC-Q101-001 human body model (contact mode) and / or JESD22-A114, class 3B
- Reverse voltage from 100 V to 600 V
- Maximum operating junction temperature of +175 °C
- AEC-Q101 qualified

APPLICATIONS

- Provide polarity protection in industrial and automotive applications

RESOURCES

- See table on next page for product information
- For technical questions, please contact DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com
- Material categorization: for definitions of compliance, please visit www.vishay.com/doc?99912

TMBS[®] RECTIFIERS

KEY PRODUCT BENEFITS

- Very low profile height of 0.95 mm (typical)
- Current ratings from 3 A to 8 A
- Low forward drop down to 0.37 V at 3 A
- Low power losses and high efficiency
- Maximum operating junction temperature up to +175 °C
- Trench MOS Schottky technology
- AEC-Q101 qualified

APPLICATIONS

- For use in high frequency DC/DC converters, switching power supplies, freewheeling diodes, OR-ing diodes, and reverse battery protection in automotive, commercial, and industrial applications





Standard Recovery Rectifiers With ESD Capability in SMPA (DO-221BC) Package

Device ⁽¹⁾	$I_{F(AV)}$ (A)	V_{BR} Range (V)	Max. V_F at I_F		AEC-Q101 Qualified
			(V)	(A)	
SE20PAB thru SE20PAJ	2.0	100 to 600	1.10	2.0	Yes
SE30PAB thru SE30PAJ	3.0	100 to 600	1.16	3.0	Yes
SE50PAB thru SE50PAJ	5.0	100 to 600	1.16	5.0	Yes

Notes

- Please click on part number to access datasheet, 3D models, ordering information, and more

⁽¹⁾ Reverse voltage, where: A = 50 V, B = 100 V, C = 150 V, D = 200 V, F = 300 V, G = 400 V, H = 500 V, J = 600 V

TMBS[®] (Trench MOS Barrier Schottky) Rectifiers in SMPA (DO-221BC) Package

Device	$I_{F(AV)}$ (A)	V_{BR} Range (V)	Max. V_F at I_F		AEC-Q101 Qualified
			(V)	(A)	
V3PAL45	3	45	0.54	3.0	Yes
V3PAN50-M3	3	50	0.54	3.0	No
V4PAL45	4	45	0.57	4.0	Yes
V4PAN50-M3	4	50	0.59	4.0	No
V5PA22	5	200	0.9	5.0	Yes
V8PAN50-M3	8	50	0.56	8.0	No
V8PAL45	8	45	0.57	8.0	Yes
V8PAL50-M3	8	50	0.57	8.0	No
V8PA6	8	60	0.63	8.0	Yes
V8PA10	8	100	0.76	8.0	Yes
V8PAM10	8	100	0.78	8.0	Yes
V8PA12	8	120	0.87	8.0	Yes
V8PAM12	8	120	0.88	8.0	Yes
V8PA22	8	200	0.92	8.0	Yes
V8PA15	8	150	1.2	8.0	Yes

Note

- Please click on part number to access datasheet, 3D models, ordering information, and more