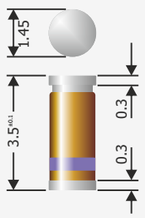
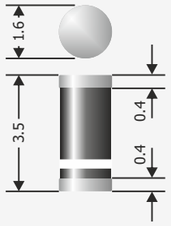
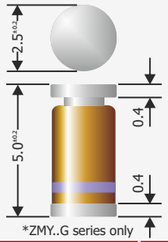
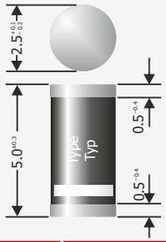
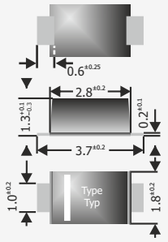
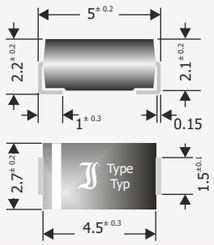
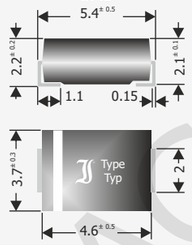
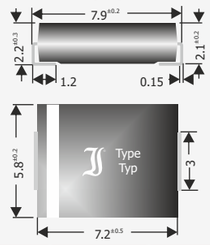
Diotec Semiconductor

SMD Diodes/Rectifier

	SOD-80C	DO-213AA	DO-213AB	DO-213AB	SOD-123FL	DO-214AC			DO-214AA	DO-214AB			
	Glass MiniMelf	Plastic MiniMelf	Glass Melf*	Plastic Melf		SMA			SMB	SMC			
			 *ZMY..G series only								

	I_{FAV}	0.015 ... 0.35 A	0.2 A	0.5 A	1 A		1 A	2 A	3 A	1 A / 3 A	1 A		1 / 2 / 3 A	2 A	2 / 3 / 4 / 5 A	3 A	3 / 5 A	8 A	I_{FAV}	
Standard Recovery	V_{RRM} 50			GL34A	GL1A	AL1A [1])	SM4001		SM5400	SL1A	M1*	S1A		S2A	S3ASMB	S3A	S5A		50	V_{RRM}
	100	**More packages**		GL34B	GL1B	AL1B [1])	SM4002		SM5401	SL1B	M2*	S1B	**1.5A**	S2B	S3BSMB	S3B	S5B		100	
	200	**see**		GL34D	GL1D	AL1D [1])	SM4003	SM5059	SM5402	SL1D	M3*	S1D	BYG10D [1])	S2D	S3DSMB	S3D	S5D		200	
	400	**"Small Signal Diodes & Transistors"**		GL34G	GL1G	AL1G [1])	SM4004	SM5060	SM5404	SL1G	M4*	S1G	BYG10G [1])	S2G	S3GSMB	S3G	S5G		400	
	600			GL34J	GL1J	AL1J [1])	SM4005	SM5061	SM5406	SL1J | SE1J [2])	M5*	S1J	BYG10J [1])	S2J	S3JSMB	S3J	S5J		600	
	800			GL34K	GL1K	AL1K [1])	SM4006	SM5062	SM5407	SL1K	M6*	S1K	BYG10K [1])	S2K	S3KSMB	S3K	S5K		800	
	1000			GL34M	GL1M	AL1M [1])	SM4007	SM5063	SM5408	SL1M	M7*	S1M	BYG10M [1])	S2M	S3MSMB	S3M	S5M		1000	
	1300				[1]) Devices with **Controlled Avalanche** Characteristic		SM513			[2]) with **ESD** Characteristic		S1T	[1]) Devices with **Controlled Avalanche** Characteristic	S2T		S3T	S5T		1300	
	1600						SM516 | AM2000 [1])				* Budget	S1W		S2W		S3W	S5W		1600	
	1800						SM518			1A in Power SOD-323: see **"Small Signal"**	Device	S1X		S2X		S3X	S5X		1800	
	[V] 2000						SM2000		under development			S1Y | S1YL*		S2Y		S3Y	S5Y		2000	[V]
Fast Recovery	V_{RRM} 50			RGL34A	RGL1A	RAL1A [1])	SA154			FRL1A	FR1A			FR2A		FR3A			50	V_{RRM}
	100			RGL34B	RGL1B	RAL1B [1])	SA155			FRL1B	FR1B			FR2B		FR3B			100	
	200			RGL34D	RGL1D	RAL1D [1])	SA156	SA261 (1200 V)		FRL1D	FR1D			FR2D	Some products are also available as **AEC-Q101** qualified parts (suffix -AQ). For further information please contact automotive@diotec.com	FR3D			200	
	400			RGL34G	RGL1G	RAL1G [1])	SA157	SA262 (1400 V)		FRL1G	FR1G		FR2TSMA (1300V)	FR2G		FR3G			400	
	600			RGL34J	RGL1J	RAL1J [1])	SA158	SA263 (1600 V)		FRL1J	FR1J		FR2WSMA (1600V)	FR2J		FR3J			600	
	800			RGL34K	RGL1K	RAL1K [1])	SA159	SA264 (1800 V)		FRL1K	FR1K		FR2XSMA (1800V)	FR2K		FR3K			800	
	[V] 1000			RGL34M	RGL1M	RAL1M [1])	SA160	SA265 (2000 V)		FRL1M	FR1M		FR2YSMA (2000V)	FR2M		FR3M			1000	[V]
Ultrafast Recov.	V_{RRM} 50	LL4150 / LL4151	BAV100	EGL34A	EGL1A	EAL1A [1])	SUF4001			USL1A	US1A	ER1A	ES1A ES2ASMA	US2A	ER2A	ES2A ES3ASMB	US3A	ER3A ES3A		50	V_{RRM}
	100	LL4148 / LL4448	BAV101	EGL34B	EGL1B	EAL1B [1])	SUF4002			USL1B	US1B	ER1B	ES1B ES2BSMA	US2B	ER2B	ES2B ES3BSMB	US3B	ER3B ES3B		100	
	200		BAV102	EGL34D	EGL1D	EAL1D [1])	SUF4003			USL1D	US1D	ER1D	ES1D ES2DSMA	US2D	ER2D	ES2D ES3DSMB	US3D	ER3D ES3D		200	
	400	Quadro-MiniMelf:	BAV103	EGL34G	EGL1G	EAL1G [1])	SUF4004			USL1G	US1G	ER1G	ES1G ES2GSMA	US2G	ER2G	ES2G ES3GSMB	US3G	ER3G ES3G		400	
	600	LS4148 / LS4448	(300 V)		EGL1J	EAL1J [1])	SUF4005			USL1J	US1J	ER1J	ES1J ES2JSMA	US2J	ER2J	ES2J ES3JSMB	US3J	ER3J ES3J		600	
	800	(100 V)			EGL1K	EAL1K [1])	SUF4006			USL1K	US1K	ER1K	BYG23T [1]) (1300V)	US2K	ER2K		US3K	ER3K		800	
	[V] 1000				EGL1M	EAL1M [1])	SUF4007			USL1M	US1M	ER1M		US2M	ER2M		US3M	ER3M		1000	[V]
Schottky Barrier	V_{RRM} 20	LL103C		SGL34-20	SGL1-20		SMS120	SM5817 SMS220	SMS320	SKL12 SKL32	SK12	SL32SMA-3G		SK22	SK32SMB	SL52-3G		SK32	SL82-3G		20	V_{RRM}
	30	LL103B		SGL34-30	SGL1-30		SMS130	SM5818 SMS230	SMS330	SKL13 SKL33	SK13			SK23	SK33SMB			SK33	**-3G = 3rd**			30	
	40	LL103A / LL101C		SGL34-40	SGL1-40		SMS140	SM5819 SMS240	SMS340	SKL14 SKL34	SK14	SL34SMA-3G	SK34SMA-3G	SK24	SK34SMB	SL54-3G	SK54-3G	SK34	**Generation**	SL84-3G	SK84-3G	40	
	50	LL101B		SGL34-50	SGL1-50		SMS150	SMS250	SMS350	SKL15 SKL35	SK15		SK35SMA	SK25	SK35SMB		SK55	SK35	**Schottky:**		SK85	50	
	60			SGL34-60	SGL1-60		SMS160	SMS260	SMS360	SKL16 SKL36	SK16	**Low V_F Schottky**	SK36SMA	SK26	SK36SMB	**Low V_F Schottky**	SK56	SK36	reduced	**Low V_F Schottky**	SK86	60	
	90			SGL34-90	SGL1-90		SMS190	SMS290	SMS390	SKL18	SK18		SK38SMA	SK28	SK38SMB		SK58	SK38	leakage!		SK88	80	
	100			SGL34-100	SGL1-100		SMS1100	SMS2100	SMS3100	SKL110	SK110		SK310SMA	SK210	SK310SMB		SK510	SK310			SK810	100	
	150										SK115		SK315SMA		SK420 (4A|200V)		SK515	SK315			SK815	150	
	[V] 100										SK1H10	**High Temperature Schottky**		SK3H10SMB SK3H15SMB				SK3H10	**High Temperature Schottky**			100|150	[V]

	P_{tot}	500 mW	1 W	1.3 W	2 W	3 W	500 mW	1 W / 1.5 W	2 W	3 W	P_{tot}	
Zener	V_Z 1 .. 5.6	ZMM1, 2.4...5.6	ZMD1, 3.9...5.6	ZMY3.9G...9.1G *	SMZ1, SMZ5.6	SZ3C1	MMSZ5227B...62B	Z1SMA1, Z1SMA5.6			1 .. 5.6	V_Z
	... 10	ZMM6.2...10	ZMD6.2...10	* **1.0 W - Glass Case**	SMZ6.2...10	SZ3C6.2...10	BZT52C3...C75	Z1SMA6.2...10	Z2SMB6.8...10	Z3SMC6.8...10	... 10	
	... 200	ZMM11...75	ZMD11...100	ZMY10...200	SMZ11...200	SZ3C11...200	**More see "Small Signal"**	Z1SMA11...100	Z2SMB11...200	Z3SMC11...200	... 200	
	[V]											[V]

	P_{PPM}		150 W	300 W	400 W	200 W	400 W	600 W	1500 W	3000 W	5000 W	P_{PPM}	
TVS	V_{BR} ... 10	uni-directional	TGL34-6.8(A)...10(A)		TGL41-6.8(A)...10(A)	SMF5.0A...8.5A	P4SMAJ5.0(A)...8.5(A)	P6SMBJ5.0(A)...8.5(A)	1.5SMCJ5.0(A)...8.5(A)	3.0SMCJ5.0(A)...8.5(A)	uni-directional	... 10	V_{BR}
	... 200		TGL34-11(A)...200(A)		TGL41-11(A)...200(A)	SMF9.0A...170A	P4SMAJ9.0(A)...170(A)	P6SMBJ9.0(A)...170(A)	1.5SMCJ9.0(A)...170(A)	3.0SMCJ9.0(A)...170(A)	5.0SMCJ12(A)...170(A)	... 200	
	... 520				TGL41-220(A)...520	SMF220A	P4SMA220(A)...550(A)	P6SMB220(A)...550(A)	1.5SMC220(A)...550(A)			... 550	
	Nomenclature for TVS diodes: No suffix – ±10% tolerance of V_{BR} | Suffix "A" – ±5% tolerance of V_{BR} | Bidirectional version – suffix "C" | Centered "J" – nominal voltage is V_{WM} | No "J" – nominal voltage is V_{BR}												
	... 10	bi-directional	TGL34-6.8C(A)...10C(A)	SDA2AK (1 V)	TGL41-6.8C(A)...10C(A)	SMF5.0CA...8.5CA	P4SMAJ5.0C(A)...8.5C(A)	P6SMBJ5.0C(A)...8.5C(A)	1.5SMCJ5.0C(A)...8.5C(A)	3.0SMCJ5.0C(A)...8.5C(A)	bi-directional	... 10	
	... 200		TGL34-11C(A)...200C(A)	SDA4AK (2 V)	TGL41-11C(A)...200C(A)	SMF9.0CA...170CA	P4SMAJ9.0C(A)...170C(A)	P6SMBJ9.0C(A)...170C(A)	1.5SMCJ9.0C(A)...170C(A)	3.0SMCJ9.0C(A)...170C(A)	5.0SMCJ12C(A)...170C(A)	... 200	
	[V] ... 520				TGL41-220C(A)...520C	SMF220CA	P4SMA220C(A)...550(CA)	P6SMB220C(A)...550(CA)	1.5SMC220C(A)...550(CA)			... 550	[V]

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