

Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)												
TYPE ⁽¹⁾	DEVICE MARKING CODE		BREAKDOWN VOLTAGE V _{BR} AT I _T ⁽²⁾ (V)			STAND-OFF VOLTAGE V _{RM}	LEAKAGE CURRENT I _{RM} AT V _{RM} I _D ⁽³⁾	CLAMPING VOLTAGE V _C AT Ι _{ΡΡΜ} (10/1000 μs)		СLAMPING VOLTAGE V _C AT I _{РРМ} (8/20 µs)		α _T MAX. 10 ⁻⁴ /°C
	UNI	BI	MIN.	MAX.	(MA)	(¥)	(µA)	(V)	(A)	(V)	(A)	
SM15T6V8A	GDE7	GDE7	6.45	7.14	10	5.80	1000	10.5	143	13.4	746	5.7
SM15T7V5A	GDK7	BDK7	7.13	7.88	10	6.40	500	11.3	132	14.5	690	6.1
SM15T10A	GDT7	BDT7	9.50	10.5	1.0	8.55	10	14.5	103	18.6	538	7.3
SM15T12A	GDX7	BDX7	11.4	12.6	1.0	10.2	5.0	16.7	90.0	21.7	461	7.8
SM15T15A	GEG7	GEG7	14.3	15.8	1.0	12.8	1.0	21.2	71.0	27.2	368	8.4
SM15T18A	GEM7	BEM7	17.1	18.9	1.0	15.3	1.0	25.2	59.5	32.5	308	8.8
SM15T22A	GET7	BET7	20.9	23.1	1.0	18.8	1.0	30.6	49.0	39.3	254	9.2
SM15T24A	GEV7	GEV7	22.8	25.2	1.0	20.5	1.0	33.2	45.0	42.8	234	9.4
SM15T27A	GEX7	BEX7	25.7	28.4	1.0	23.1	1.0	37.5	40.0	48.3	207	9.6
SM15T30A	GFE7	BFE7	28.5	31.5	1.0	25.6	1.0	41.5	36.0	53.5	187	9.7
SM15T33A	GFG7	GFG7	31.4	34.7	1.0	28.2	1.0	45.7	33.0	59.0	169	9.8
SM15T36A	GFK7	BFK7	34.2	37.8	1.0	30.8	1.0	49.9	30.0	64.3	156	9.9
SM15T39A	GFM7	BFM7	37.1	41.0	1.0	33.3	1.0	53.9	28.0	69.7	143	10.0
SM15T68A	GGG7	GGG7	64.6	71.4	1.0	58.1	1.0	92.0	16.3	121	83	10.4
SM15T100A	GGV7	GGV7	95.0	105	1.0	85.5	1.0	137	11.0	178	56	10.6
SM15T150A	GHK7	GHK7	143	158	1.0	128	1.0	207	7.20	265	38	10.8
SM15T200A	GHR7	GHR7	190	210	1.0	171	1.0	274	5.50	353	28	10.8
SM15T220A	GHR8	GHR8	209	231	1.0	188	1.0	328	4.60	388	26	10.8

Notes

 $^{(1)}\,$ For bidirectional devices add suffix "CA" instead of "A"

 $^{(2)}~V_{BR}$ measured after I_T applied for 300 μs square wave pulse

 $^{(3)}$ For bi-polar devices with V_{RM} = 10 V or under, the I_{RM} limit is doubled

THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	VALUE	UNIT				
Typical thermal resistance, junction to ambient air ⁽¹⁾	$R_{ extsf{ heta}JA}$	75	°C/W/				
Typical thermal resistance, junction to lead R _{0JL} 15							

Note

⁽¹⁾ Mounted on minimum recommended pad layout

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SM15T10A-E3/57T	0.011	67T	950	7" diameter plastic tape and real			
SM15T10A-M3/57T	0.211	571	850	7 diameter plastic tape and reel			
SM15T10A-E3/9AT	0.011	047	2500	13" diameter plastic tape and reel			
SM15T10A-M3/9AT	0.211	941	3500				
SM15T10AHE3_A/H (1)	0.011		950	7" diameter plactic tapa and real			
SM15T10AHM3_A/H (1)	0.211	п	650	i diameter plastic tape and reel			
SM15T10AHE3_A/I (1)	0.011	1	3500	10" diameter plantic tana and real			
SM15T10AHM3_A/I (1)	0.211	1		is dameter plastic tape and reel			

Note

(1) AEC-Q101 qualified

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RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)



Fig. 1 - Peak Pulse Power Rating Curve



Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature



Fig. 3 - Pulse Waveform



Fig. 4 - Typical Junction Capacitance Uni-Directional



Fig. 5 - Typical Transient Thermal Impedance





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3

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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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 4
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