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GSV

SURGE VOLTAGE SUPPRESSORS

Pnp diffused silicon structure
Symmetric blocking characteristics
Suitable for SCR, BJT and IGBT applications

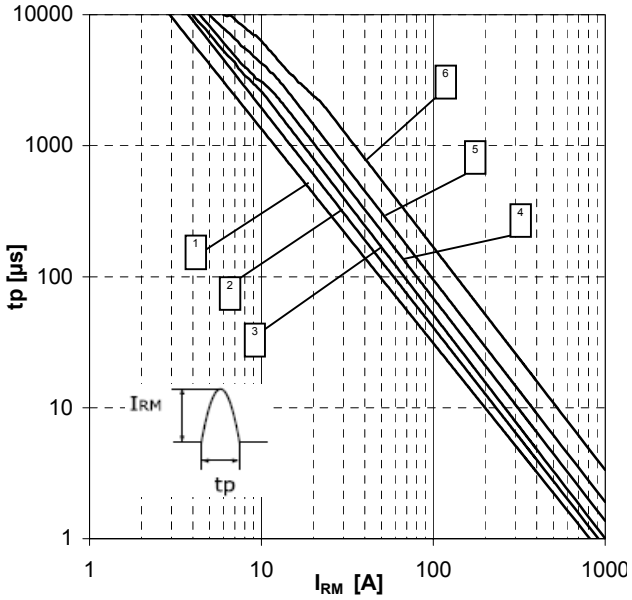
Type	V_R	Tolerance	ThyrIstor V_{DRM} V_{RRM}	I_{RM} [A] for base width				P_{RAV}
	[V]	[V]	[V]	1x10[µs]	1x100[µs]	1x1[ms]	1x10[ms]	[W]
GSV22020-16	1600	± 60	1600	200	50	13	3	30
GSV22020-15	1500	± 60	1500					
GSV22023-14	1400	± 60	1400	230	58	15	3.4	30
GSV22023-13	1300	± 60	1300					
GSV22026-12	1200	± 60	1200	260	67	18	3.6	30
GSV22026-11	1100	± 60	1100					
GSV22030-10	1000	± 60	1000	300	80	21	4	30
GSV22030-09	900	± 60	900					
GSV22038-08	800	± 60	800	380	100	25	4.5	30
GSV22038-07	700	± 60	700					
GSV22050-06	600	± 60	600	500	135	33	7.5	30
GSV22050-05	500	± 60	500					

Notice:
V_R … Symmetrical avalanche voltage at I_A = 20A, t_p = 10 µs, T_{vj} = 60 °C
I_{RM} … Max. avalanche current for a single sine half wave pulse
P_{RAV} … Admissible continuous lossess at R_{thja} < 1 K/W, T_a < 60 °C

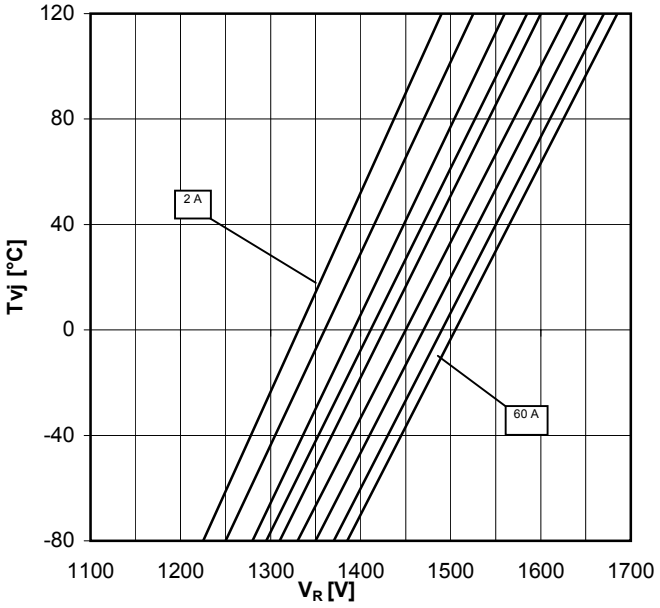
Major Ratings			*Value*	*Units*
$V_R(T_J)$[1]	Dependence of avalanche voltage V_R on junction temperature	$V_R(T) = V_{R0}[1 + 1.1x10^{-3}(T - 60°C)]$		V
C_J	Junction capacitance U_R = 0V, T_j=60°C		1100	pF
R_{th}	Thermal resistance junction-heatsink		0.6	K/W
T_jT_{STG}	Operating storage temperature range		-40..125	°C
	Admissible acceleration (vibration)		10g	m/s^2
M_U	Mounting torque		10 ±10%	Nm

1) V_R(60°C) = V_{RO}; V_R(25°C) = 0,93 x V_{RO}; V_R(125°C) = 1,07 x V_{RO}

Max allowable current peak vs pulse width

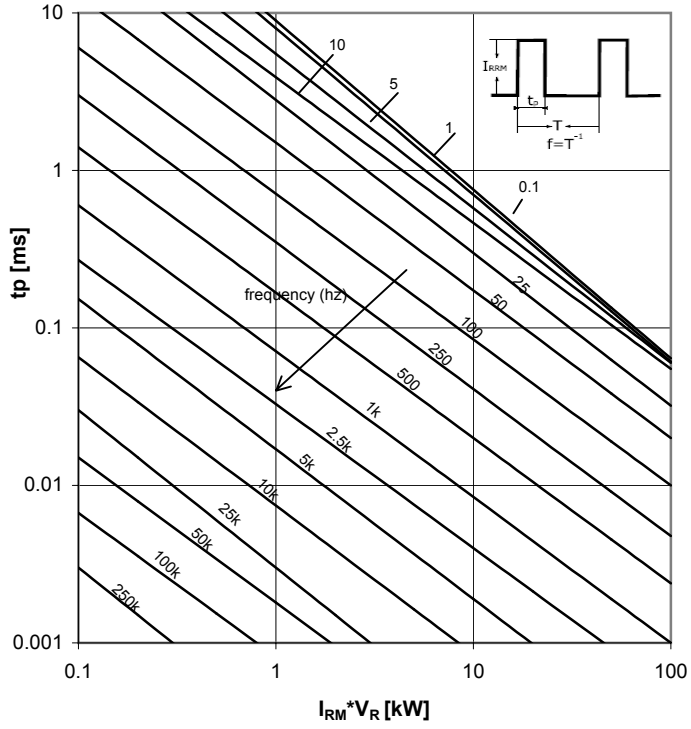


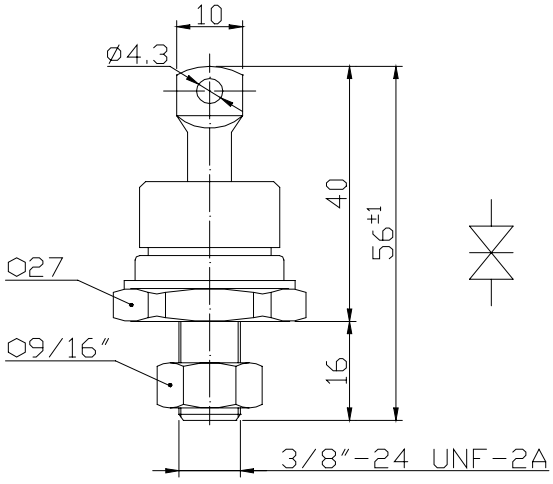
Avalanche voltage vs Tj
Typical behaviour
(for type GSV22020-15 with tp = 15 µs)



1 GSV22020-.. **4** GSV22030-..
2 GSV22023-.. **5** GSV22038-..
3 GSV22026-.. **6** GSV22050-..

Max. admissible power in function of pulse width tp





dimensions mm