



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}
				1x10[μs]	1x100[μs]	1x1[ms]	1x10[ms]	
	[V]	[V]	[V]					[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_{vi} = 60 °C

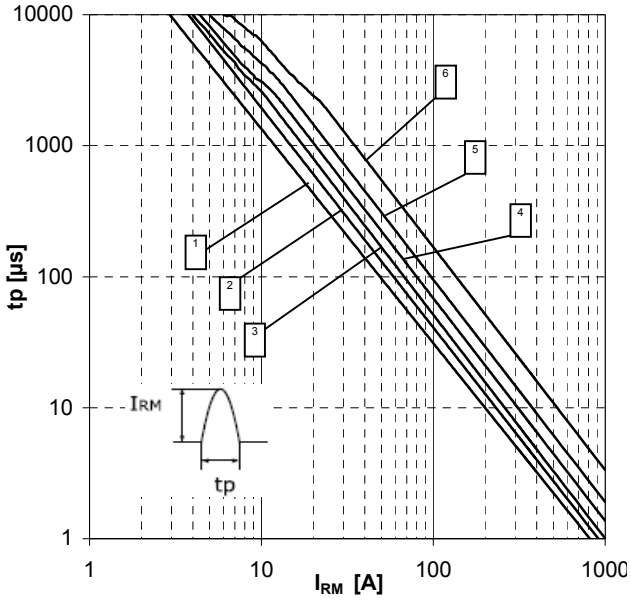
I_{RM} ... Max. avalanche current for a single sine half wave pulse

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	$V_R(T) = V_{R0} [1 + 1.1 \times 10^{-3} (T - 60^\circ\text{C})]$	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 _J T _{STG}	Operating storage temperature range	-40..125	°C
	Admissible acceleration (vibration)	10g	m/s ²
M _U	Mounting torque	10 ±10%	Nm

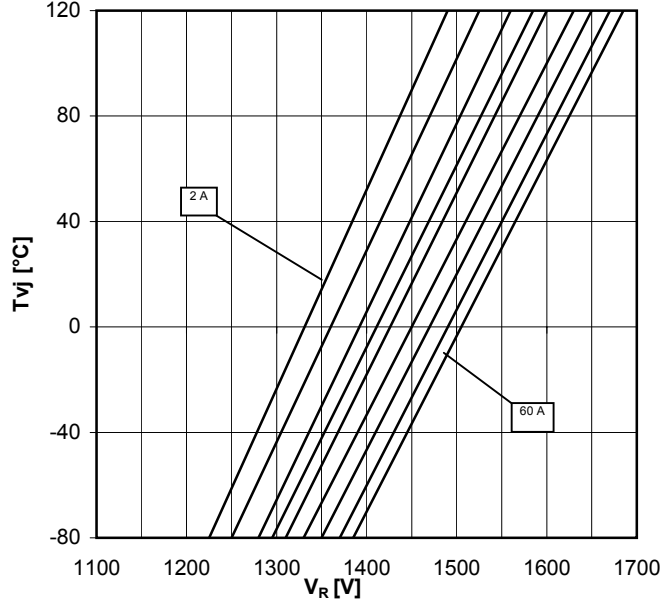
1) V_R(60°C) = V_{RO}; V_R(25°C) = 0,93 x V_{RO}; V_R(125°C) = 1,07 x V_{RO}

Max allowable current peak vs pulse width

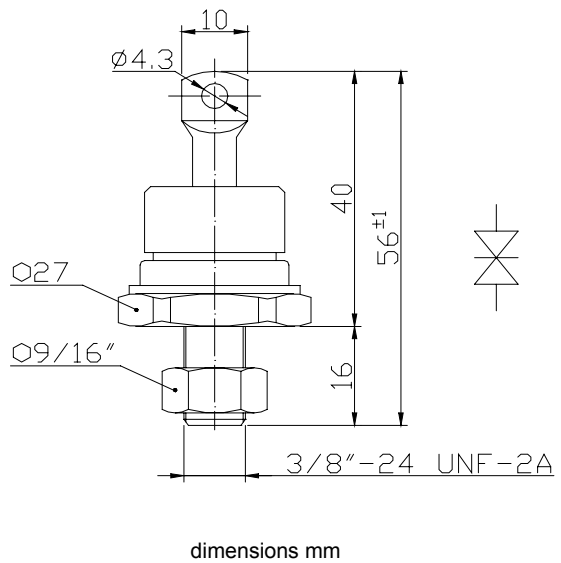
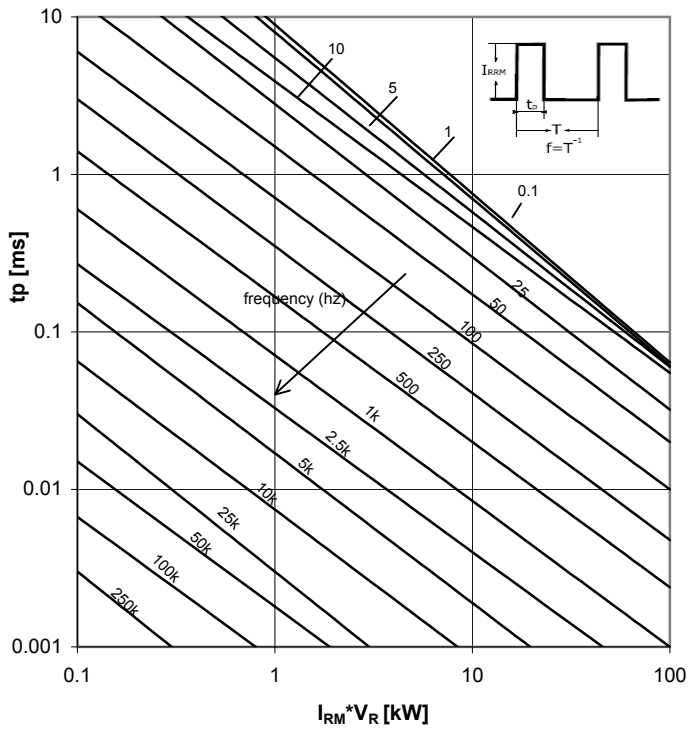


- 1 GSV22020-.. 4 GSV22030-..
- 2 GSV22023-.. 5 GSV22038-..
- 3 GSV22026-.. 6 GSV22050-..

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



Max. admissible power in function of pulse width tp



In the interest of product improvement Green Power Solutions reserves the right to change any specification given in this data sheet without notice.