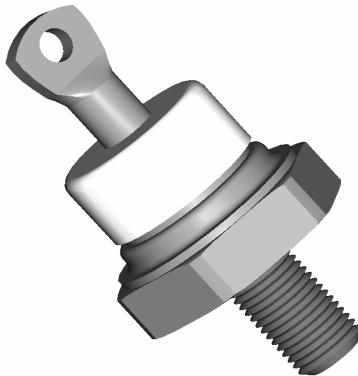




GSV

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]	
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 $I_A = 20A$, $t_p = 10 \mu s$, $T_{vj} = 60^\circ C$

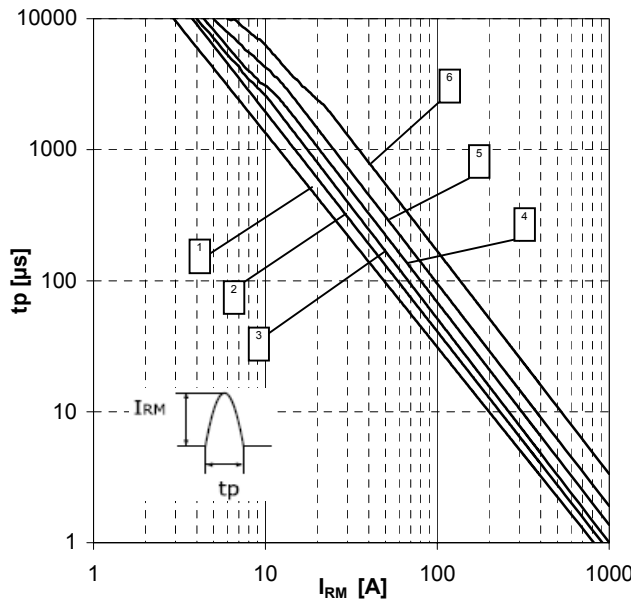
I_{RM} ... Max. avalanche current for a single sine half wave pulse

P_{RAV} ... Admissible continuous lossess at $R_{thja} < 1 K/W$, $T_a < 60^\circ C$

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

1) $V_R(60^\circ C) = V_{R0}$; $V_R(25^\circ C) = 0,93 \times V_{R0}$; $V_R(125^\circ C) = 1,07 \times V_{R0}$

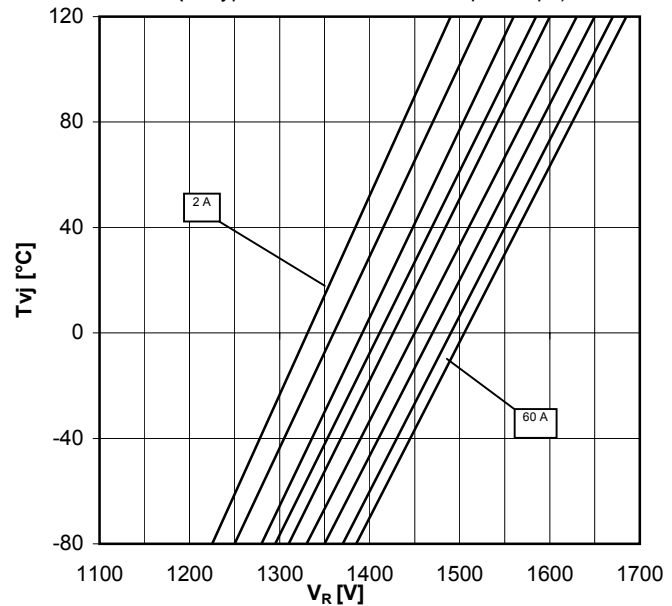
**Max allowable current peak
vs pulse width**



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

Avalanche voltage vs T_j

Typical behaviour
(for type GSV22020-15 with $t_p = 15 \mu s$)



**Max. admissible power in function of pulse
width t_p**

