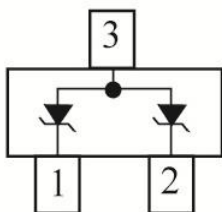


Features

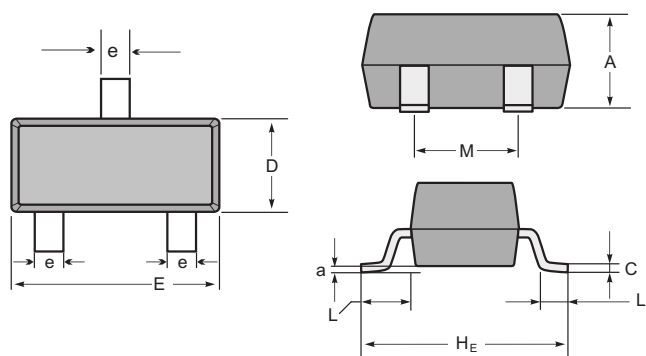
2 Unidirectional transil functions
 Low leakage current: $I_R \max < 20 \mu A$ at V_{RM}
 350W peak pulse power(8/20 μs)
 Transient protection for data lines as per
 IEC61000-4-2(ESD) 15KV(air) 8KV(contact)
 IEC61000-4-5(Lightning) see IPPM below

Applications

Computers
 Printers
 Communication systems



SOT23



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			

Absolute Maximum Rating

Parameter	Symbol	Limits	Unit
Peak Pulse Power ($t_p = 8/20\mu s$)	PPP	350	W
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C
Storage Temperature Range	T _{stg}	-55~+150	°C
Operating Temperature Range	T _{op}	-40~+125	°C
Maximum junction temperature	T _j	150	°C
Electrostatic discharge	V _{PP}		kV
IEC61000-4-2 air discharge		15	
IEC61000-4-2 contact discharge		8	

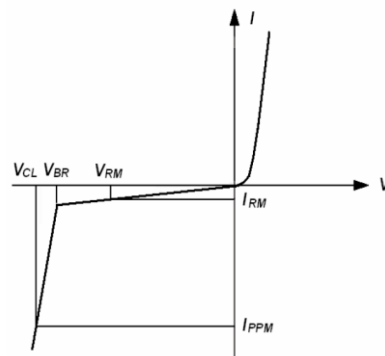
GSOT12C

Electrical Characteristics

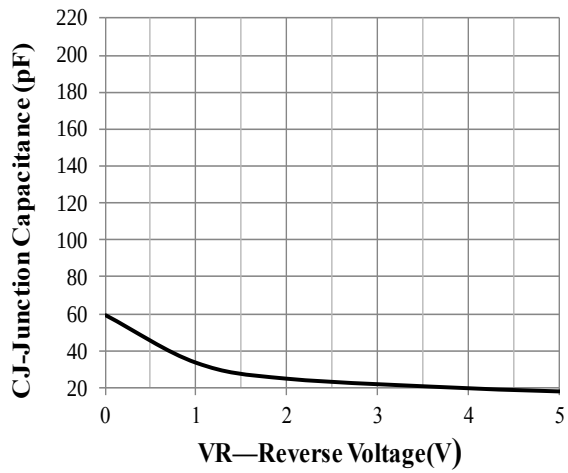
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				12	V
VBR	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	13.3	14.4	17	V
IR	Reverse Leakage Current	$VRWM = 12\text{V}$			1	μA
VC	Clamping Voltage	$I_{PP} = 1\text{A}$ (8/20 μs)			22	V
VC	Clamping Voltage	$I_{PP} = 12\text{A}$ (8/20 μs)		25	30	V
Ipp	Peak Pulse Current	$t_p = 8/20\mu\text{s}$			12	A
CJ	Capacitance	$VR = 0\text{V}$, $f = 1\text{MHz}$		60	90	pF

Electrical Parameters (TA = 25 °C unless otherwise noted)

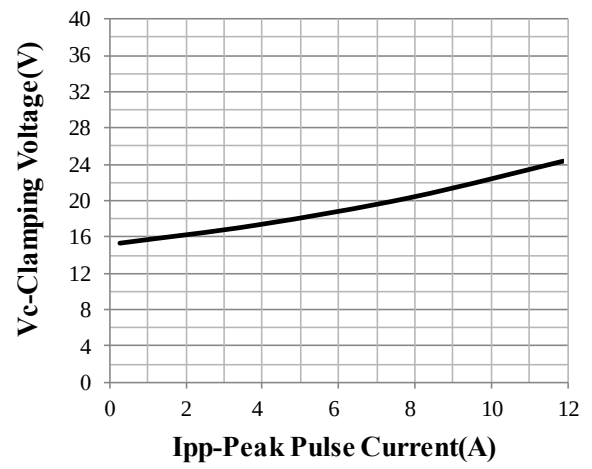
Symbol	Parameter
VRM	Stand-off voltage
VBR	Breakdown voltage
VCL	Clamping voltage
IRM	Leakage current
IPPM	Peak pulse current



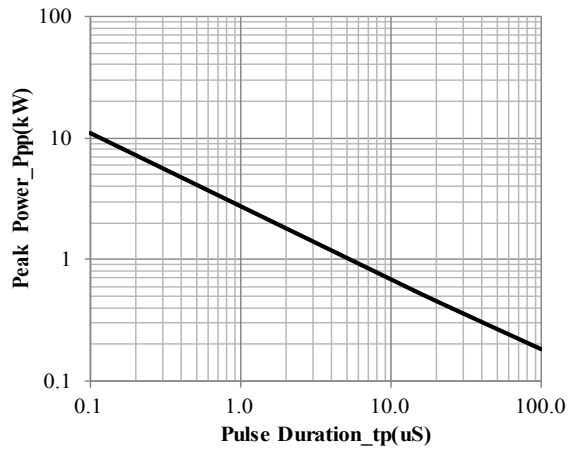
RATING AND CHARACTERISTIC CURVES (GSOT12C)



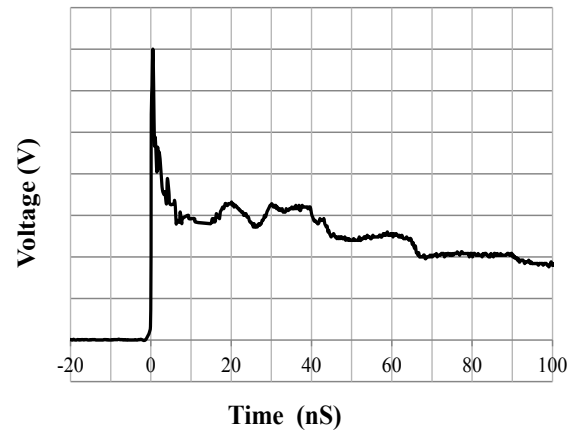
Junction Capacitance vs. Reverse Voltage



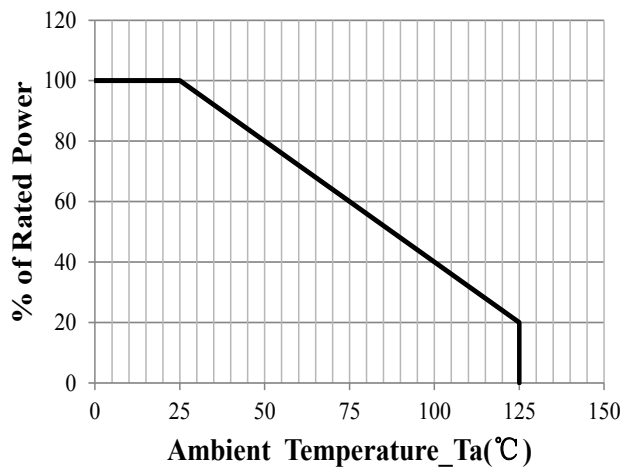
Clamping Voltage vs. Peak Pulse Current



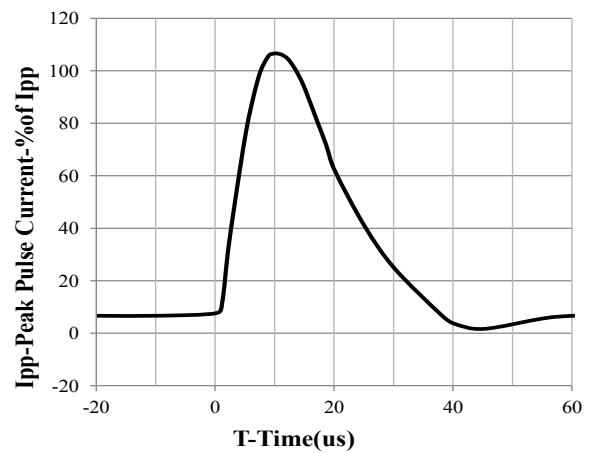
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform



Power Derating Curve



8 X 20us Pulse Waveform