



SE12Q42UVD3GH

ESD PROTECTION DIODE

FEATURES

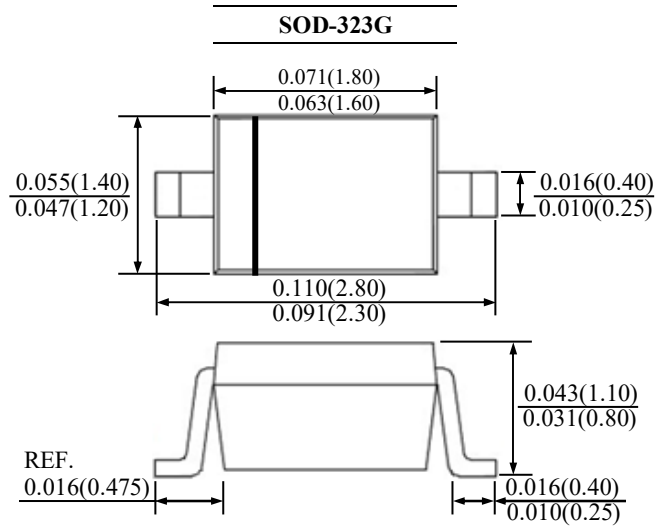
- Reverse standoff voltage: 12V
- IEC61000-4-2(ESD) 30kV(air), 30kV(Contact)
- Suffix " H " indicated Halogen-free part, ex.SE12Q42UVD3GH

APPLICATIONS

- Industrial instrument
- 5G Radio dot and wireless base station
- SSD

MECHANICAL DATA

Case : SOD-323G



Dimensions in inches and (millimeters)

PIN CONFIGURATION



Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power (tp = 8/20μs)	P _{PP}	3500	W
Peak Pulse Current (tp = 8/20μs)	I _{PP}	180	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Junction Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



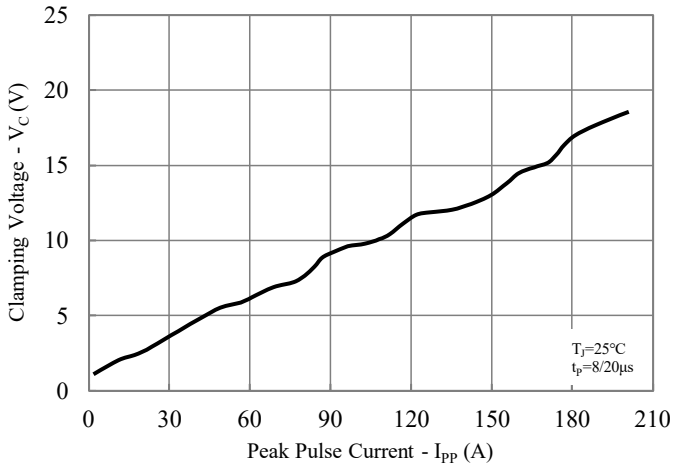
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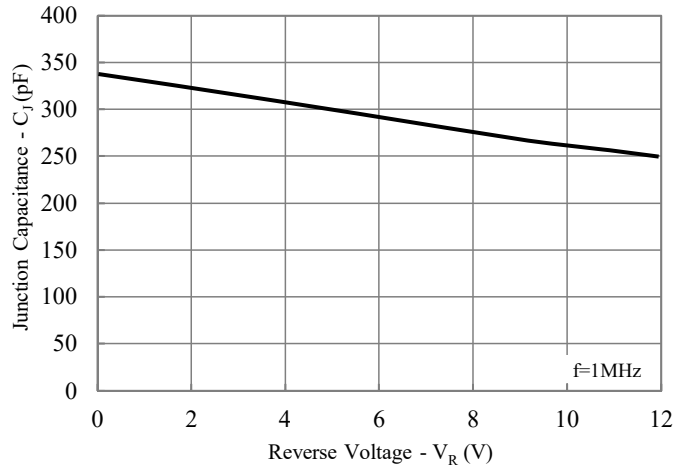
Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Units
Reverse Stand-Off Voltage	-	V_{RWM}	-	-	12	V
Breakdown Voltage	$I_R=1mA$	V_{BR}	13.3	14.4	16.6	V
Reverse Leakage Current	$V_{RWM}=12V$	I_R	-	-	0.1	μA
Clamping Voltage	$I_{pp}=1A, t_p=8/20\mu s$	V_C	-	1.1	2.0	V
	$I_{pp}=10A, t_p=8/20\mu s$		-	1.9	2.5	
	$I_{pp}=60A, t_p=8/20\mu s$		-	6.0	8.5	
	$I_{pp}=180A, t_p=8/20\mu s$		-	16.0	19.5	
Junction Capacitance	$V_R=0V, f=1MHz$	C_J	-	350	420	pF

RATINGS AND CHARACTERISTIC CURVES



Clamping Voltage vs. Peak Pulse Current



Junction Capacitance vs. Reverse Voltage