

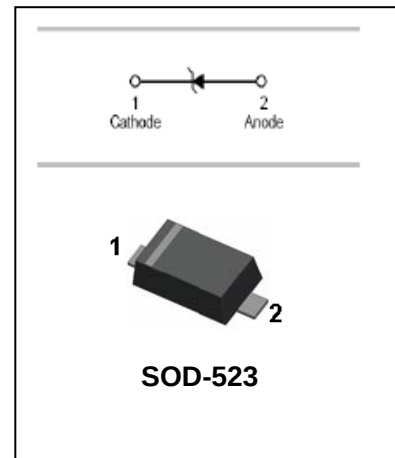
Plastic-Encapsulate Diodes

TGESD12VD5

FEATURES

- Reverse working (Stand-off) voltages: 12V
- Low leakage
- Response time is typically<1ns
- ESD Rating of Class 3(>16kV) per Human Body Model
- IEC61000-4-2Level 4ESD Protection
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



APPLICATIONS

- Designed to protect voltage sensitive components
From ESD and transient

ORDERING INFORMATION

Type No.	Marking	Package Code
TGESD12VD5	ZM	SOD-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter		Symbol	Limits	Unit
IEC 61000-4-2 (ESD)	Air Contact	V_{ESD}	± 30	kV
ESD voltage	per human body model per machine model	V_{ESD}	16 400	kV V
Total power dissipation on FR-5 board(Note 1)		P_D	150	mW
Junction and Storage temperature range		T_j, T_{stg}	-55 to+150	°C
Thermal Resistance Junction-to Ambient		$R_{\theta JA}$	833	°C/W
Lead solder temperature range (10 Second Duration)		T_L	260	°C

Note 1.FR-5=1.0*0.75*0.62in

Plastic-Encapsulate Diodes

TGESD12VD5

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Device	Device Marking	V_{RWM} (V)	$I_R(\mu A)$ @ V_{RWM}	$V_{BR}(V)$ @ I_T		I_T	$V_C@$ I_{PP}	I_{PP}	$V_C@$ Max I_{PP}	P_{PK}	$C(pF)$
		Max.	Max.	Min.	Max.	mA	V	A	V	W	pF
TGESD12VD5	ZM	12	1.0	13.3	15.7	1.0	25	9.6	29	240	55

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

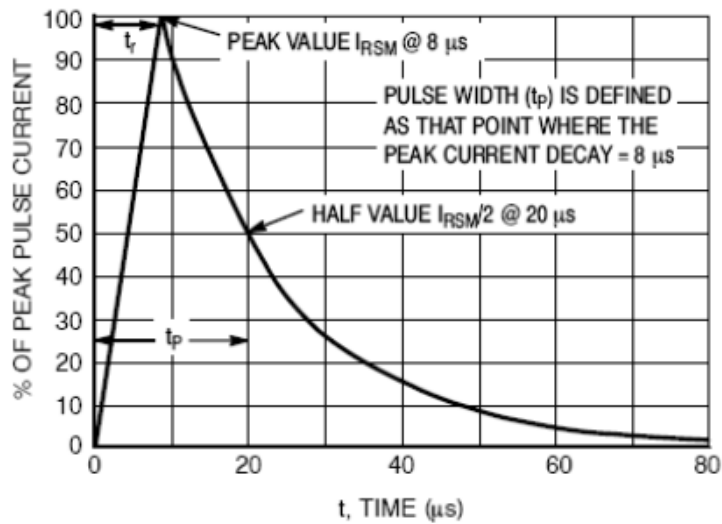


Figure 1. 8 x 20 μs Pulse Waveform

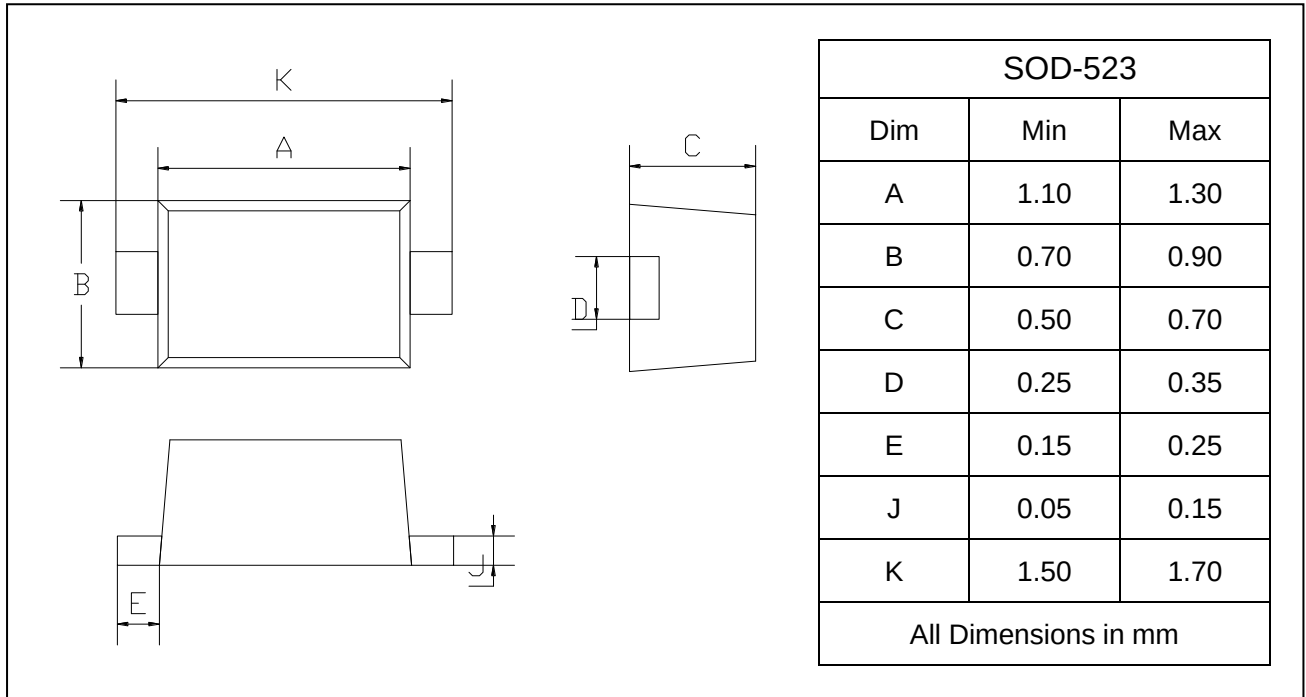
Plastic-Encapsulate Diodes

TGESD12VD5

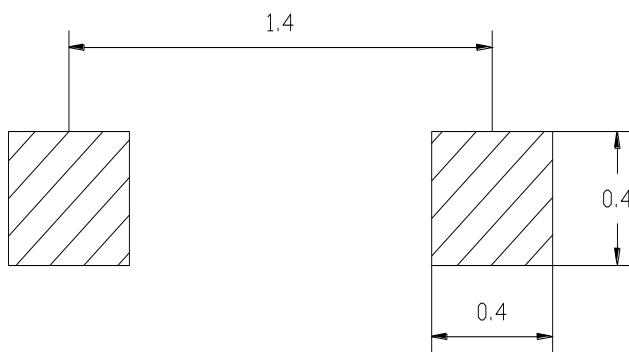
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
TGESD12VD5	SOD-523	3000 pcs / Tape & Reel