



Features

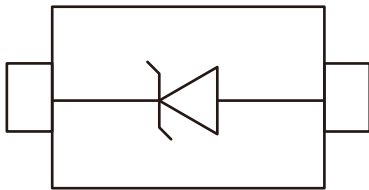
- 400W peak pulse power (8/20 μ s)
- Operating voltage: 3.3V
- Low leakage current
- Low clamping voltage
- Junction capacitance: 200pF max
- IEC61000-4-2 (ESD) \pm 30kV (air), \pm 30kV (contact)
- IEC61000-4-5 (Lightning) 25A (8/20 μ s)
- RoHS Compliant



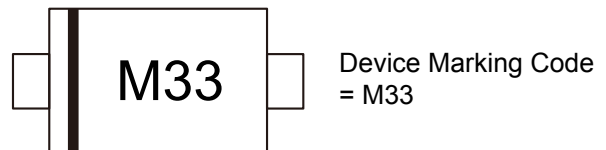
Mechanical Characteristics

- Case: Molded plastic, SOD-523FL
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Moisture Sensitivity: Level 3 per J-STD-020

Pin Configuration



Marking Code



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20 μ s waveform)	P_{PPM}	400	W
Peak Pulse Current (tp=8/20 μ s waveform)	I_{PP}	25	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	\pm 30 \pm 30	kV
Operating Temperature Range	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$



Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage		V_{RWM}			3.3	V
Breakdown Voltage	$I_T = 1\text{mA}$	V_{BR}	5			V
Reverse Leakage Current	$V_{RWM} = 3.3\text{V}$	I_R			0.5	μA
Clamping Voltage	$I_{PP} = 1\text{A}$ (8 x 20 μs pulse)	V_C			8	V
Clamping Voltage	$I_{PP} = 25\text{A}$ (8 x 20 μs pulse)	V_C			14	V
Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J			200	pF



Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

FIG1: Power rating derating curve

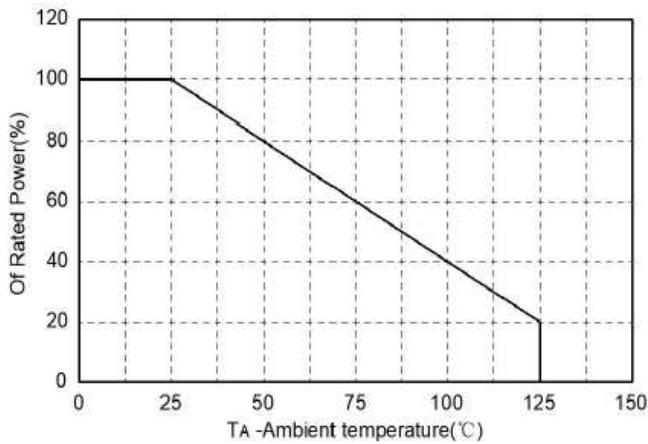


FIG2: pulse Waveform

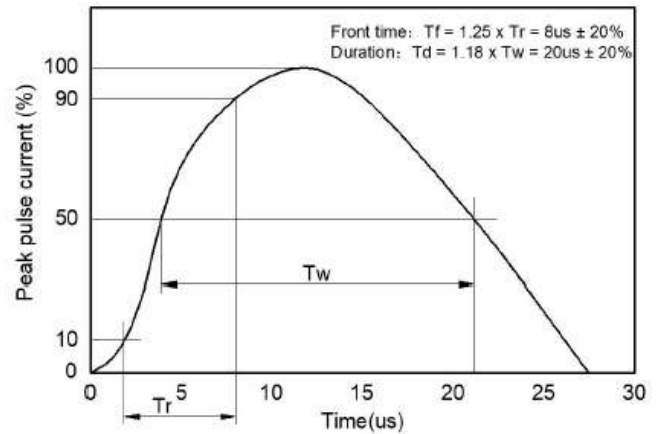


FIG3: Capacitance between terminals characteristics

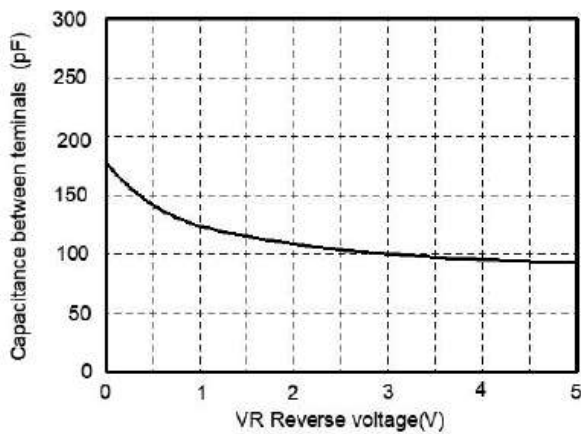
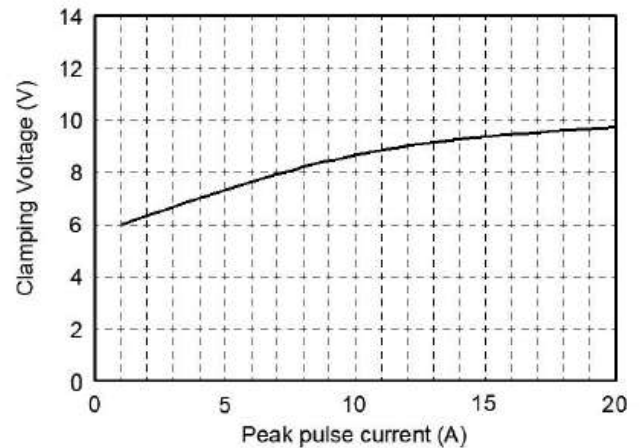
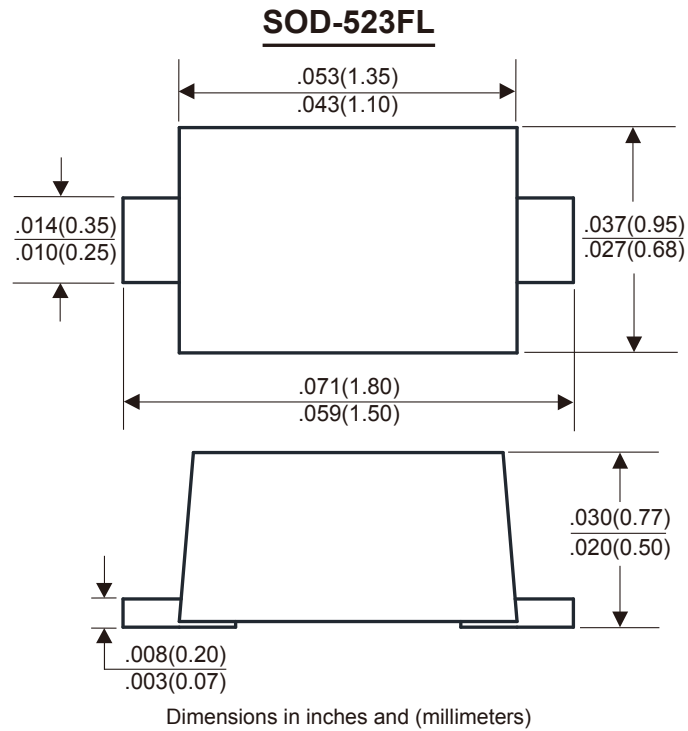


FIG4: Clamping Voltage vs. Peak Pulse Current

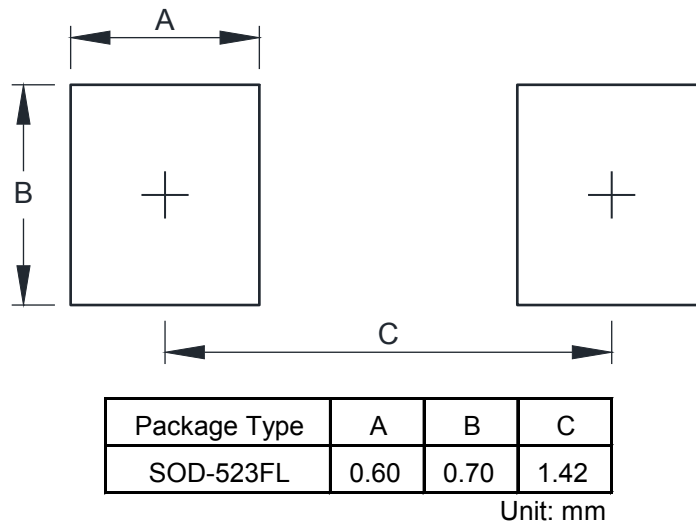




Structures and Dimensions



Recommended Soldering Pad Dimensions



Quantity

Part Number	Package Type	Reel Size (inch)	Reel (Kpcs)
YEDSD523R25AU	SOD-523FL	7	8