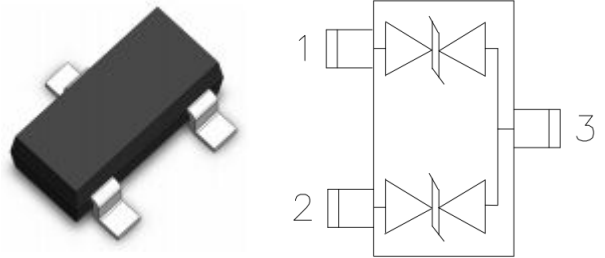


Features

- ✧ Up to 2 lines protects
- ✧ Junction capacitance(Typ.value:10pF)
- ✧ Peak Pulse current (8/20 μ s) MAX : 5A
- ✧ Low leakage current
- ✧ Working voltages:54V
- ✧ Compliant to Halogen-free
- ✧ Suffix “-Q1” for AEC-Q101

Pin Configuration



Applications

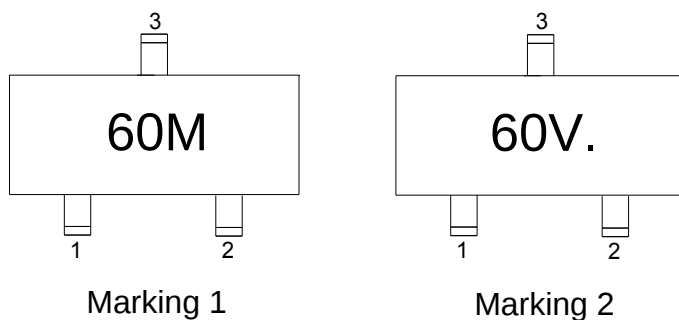
- ✧ Automotive Applications
- ✧ CAN and CAN-FD
- ✧ Electronic Control Units
- ✧ Body Control Units
- ✧ ADAS Control Units
- ✧ PowerTrain Control Units

Protection Solution to Meet

- ✧ IEC61000-4-2 (ESD) $\pm$ 30kV (air), $\pm$ 30kV (contact)

Mechanical Characteristics

- ✧ SOT-23 package
- ✧ Soldering compound flammability rating : UL 94V-0
- ✧ Lead Finish:Matte Tin
- ✧ Marking code : 60M / 60V.



Absolute Maximum Ratings (T=25°C, RH=45%-75%, unless otherwise noted)

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	550	W
Peak Pulse Current (8/20μs)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	±30 ±30	KV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (T=25°C, RH=45%-75% unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				54	V
Reverse Breakdown Voltage	V _{(BR)R}	I _R = 1mA	60	70	80	V
Reverse Leakage Current	I _R	V _R = 54V			1	uA
Clamping voltage	V _C	I _{PP} = 1A, T _P =8/20us			85	V
Clamping voltage	V _C	I _{PP} =5A, T _P =8/20us		92	110	V
Junction capacitance	C _T	V _R =0V, f =1MHz		10		pF
	C _T	V _R =0V, f =1MHz, I/O to I/O		5		pF

Typical Characteristics

FIG1: Power rating derating curve

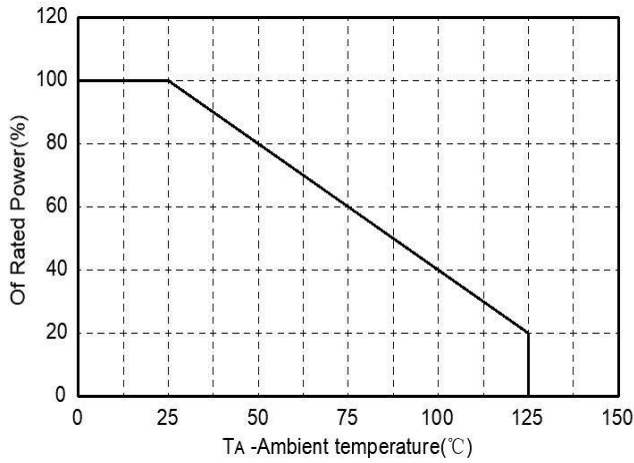


FIG2: pulse Waveform

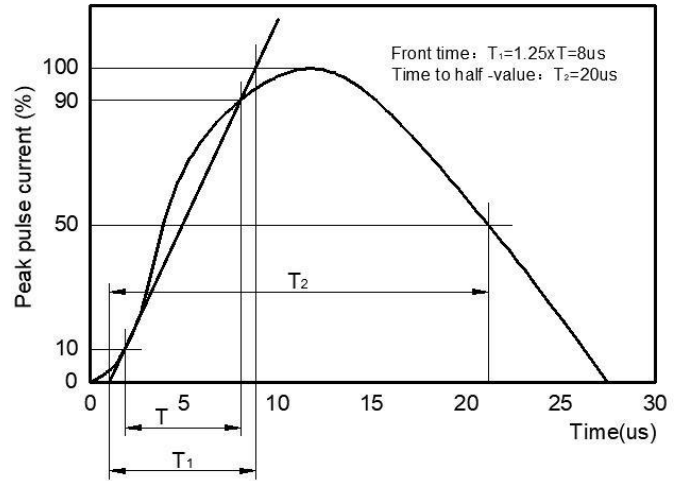


FIG3: Capacitance between terminals characteristics

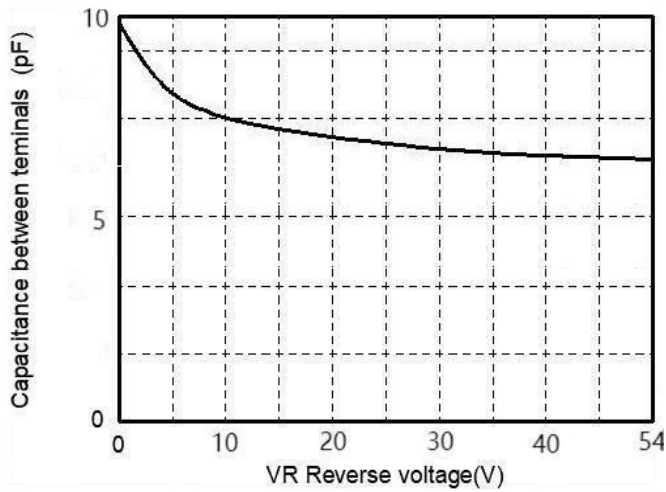
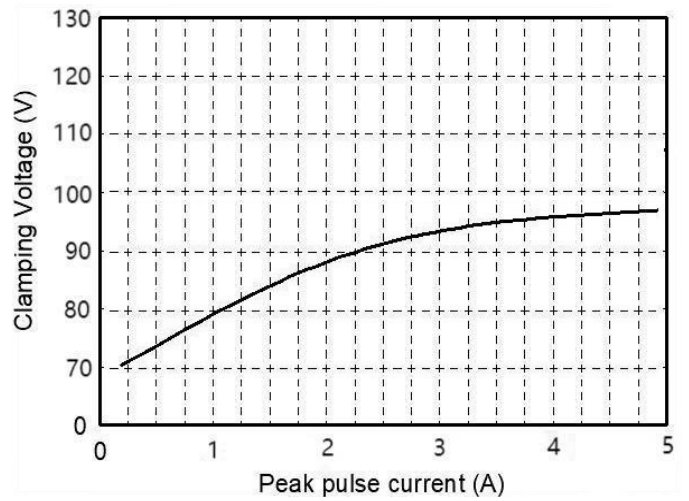
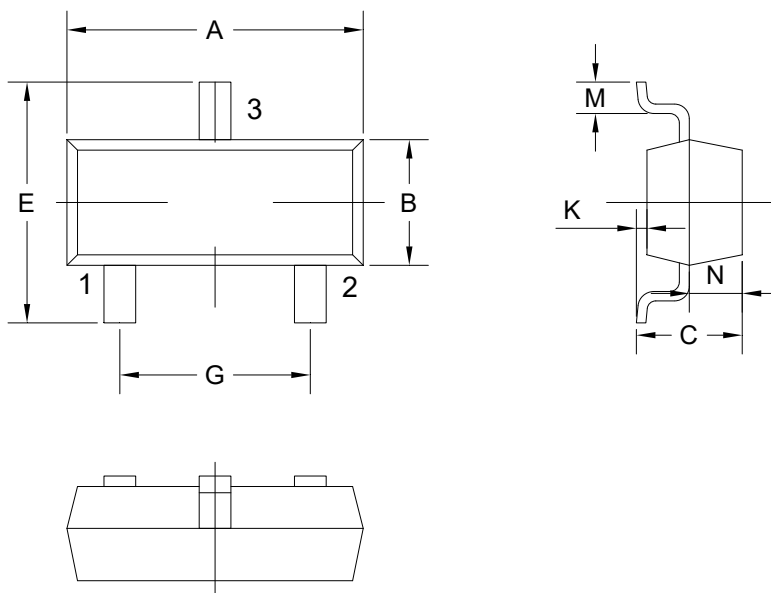


FIG4: Clamping Voltage vs. Peak Pulse Current

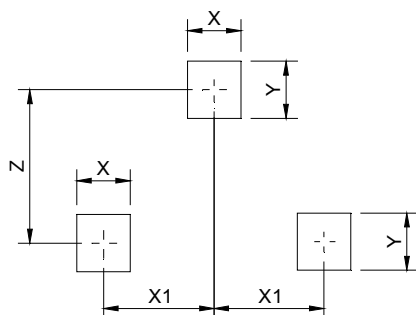


SOT-23 Package Outline Drawing



COMMON DIMENSIONS CUNITS MEASURE=MILLIMETER					
SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A	2.80	3.04	G	1.80	2.00
B	1.20	1.40	K	0	0.10
C	0.90	1.15	M	0.20	-
E	2.25	2.55	N	0.50	0.70

Suggested Land Pattern



X	0.60mm
X1	0.95mm
Y	0.80mm
Z	2.02mm