

TVS Diode Array

Features:

- Low leakage current
- Operating voltage: 70V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 Air discharge: $\pm 30\text{kV}$
 Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-5 (Lightning) 25A (8/20 μs)
- RoHS Compliant

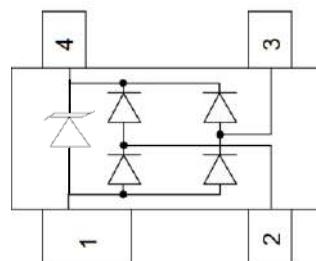
Applications:

- Peripherals
- Industrial Equipment
- Notebook Computers
- Portable Instrumentation
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDAs) and Pagers

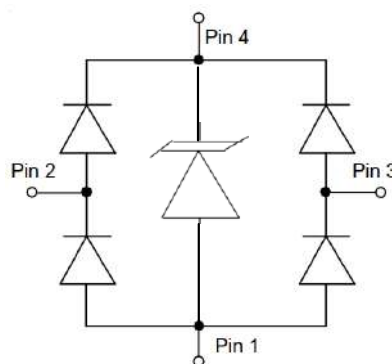
Mechanical Characteristics

- Package: SOT-143
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000pcs
- Reel Size: 7inch

SOT-143



Pin Configuration



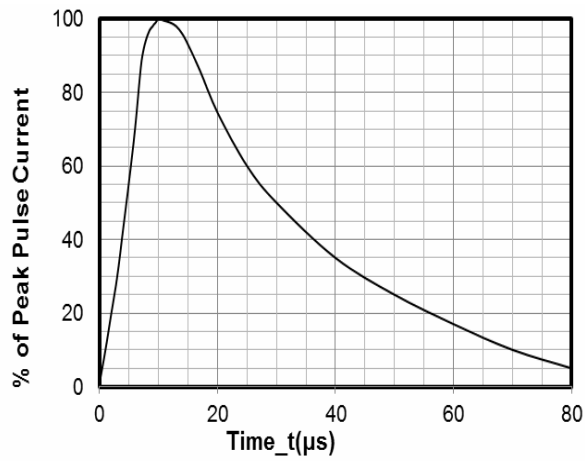
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	250	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 30	Kv
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

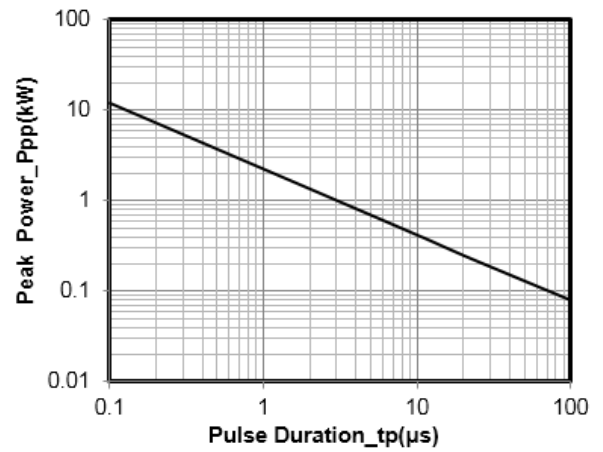
Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
KWSR70	ASR70	70	85	0.05	1.5	10	25	5	5

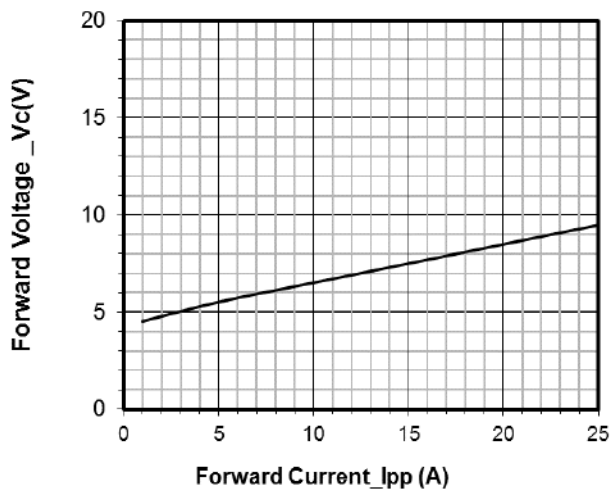
Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



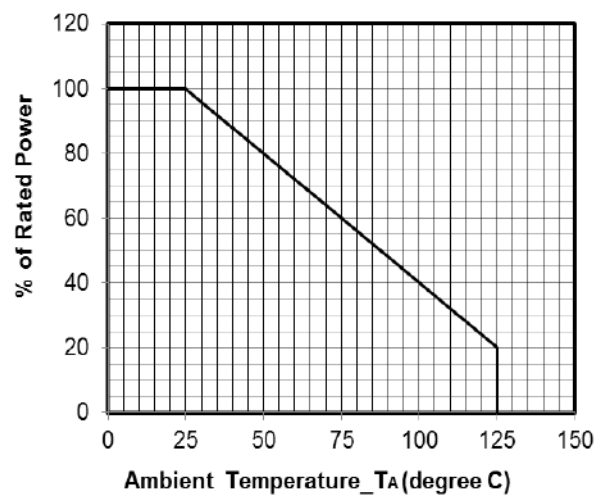
8 X 20 μs Pulse Waveform



Peak Pulse Power vs. Pulse Time

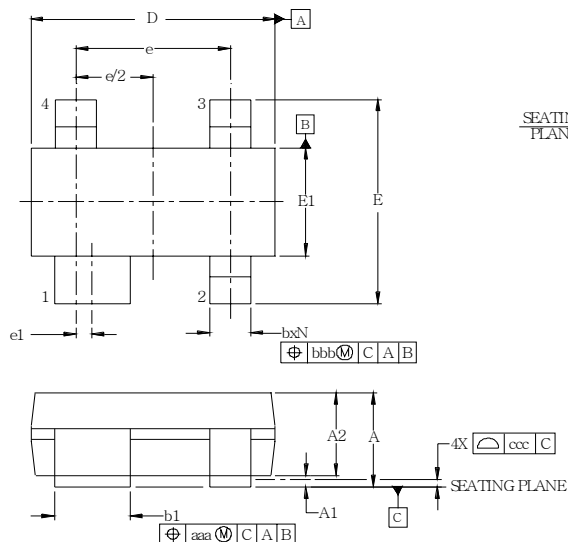


Clamping Voltage vs. Peak Pulse Current



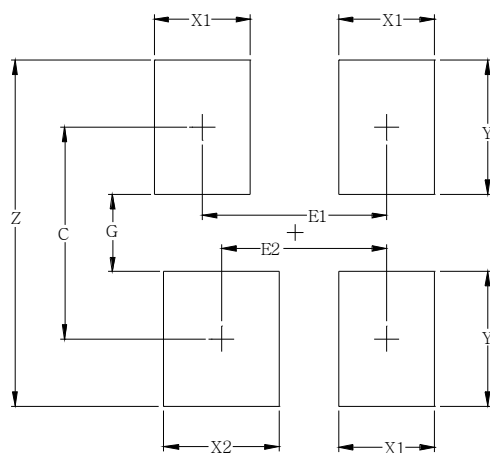
Power Derating Curve

SOT-143 Package Outline Drawing



DIM	INCHES		MILLIMETERS	
	MIN	NOM	MAX	MIN
A	.031	-	.048	0.80
A1	.000	-	.006	0.15
A2	.029	.035	.042	0.75
b	.011	-	.020	0.30
b1	.029	-	.037	0.76
c	.013	-	.018	0.33
D	.110	.114	.120	2.80
E	.082	.083	.104	2.10
E1	.047	.051	.055	1.20
e	.075	-	1.92	BSC
e1	.008	-	.020	BSC
L	.015	.020	.024	0.40
L1	(.021)	-	(.054)	-
N	4	-	4	-
θ	0°	-	8°	0°
aaa	.006	-	.015	-
bbb	.008	-	.020	-
ccc	.004	-	.010	-

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	2.20	0.087
E1	1.92	0.076
E2	1.72	0.068
G	0.80	0.031
X1	1.00	0.039
X2	1.20	0.047
Y	1.40	0.055
Z	3.60	0.141