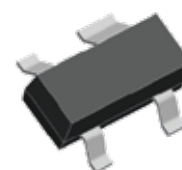


FEATURES

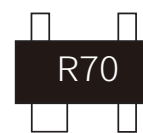
- | Array of surge rated, low capacitance diodes
- | Protects two I/O lines
- | Low clamping voltage
- | Low capacitance (1.5pF typical) for high-speed interfaces
- | Low leakage current

APPLICATIONS

- | ADSL Lines
- | I²C BUS Protection
- | Video Line Protection
- | T1/E1 secondary IC Side Protection
- | Portable Electronics
- | Microcontroller Input Protection
- | WAN/LAN Equipment



SOT-143



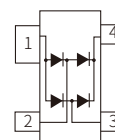
Marking

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003



Schematic Symbol

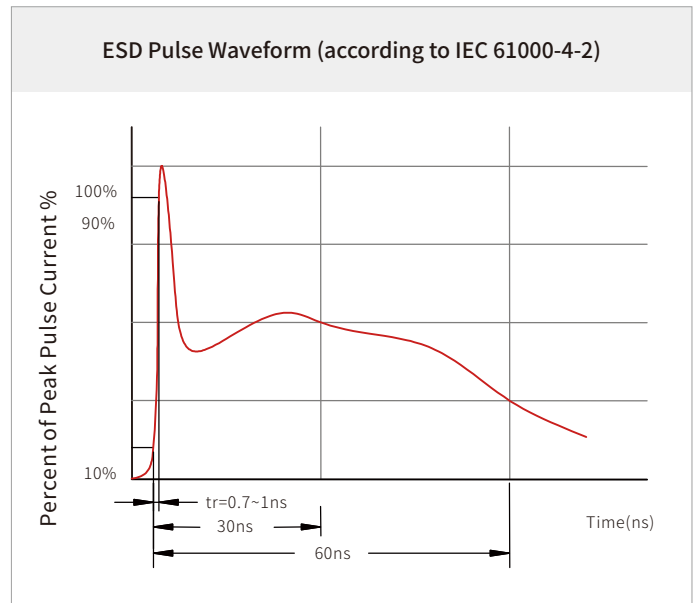
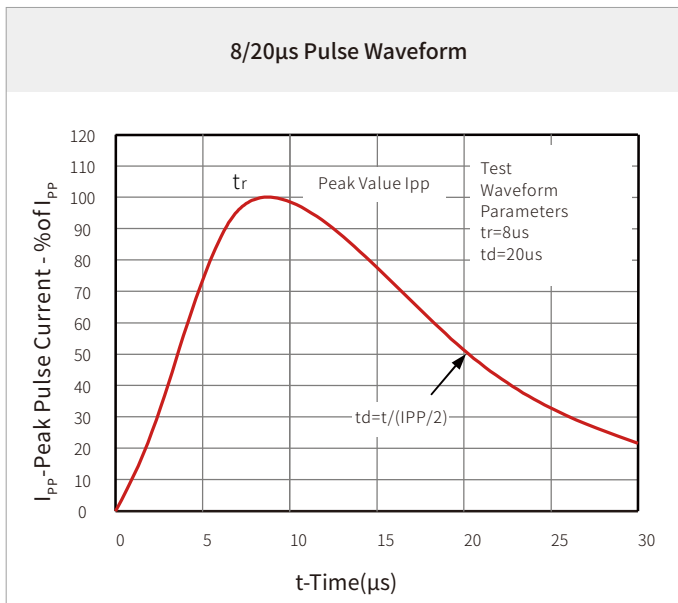
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
I_{PP}	Forward Peak Pulse Current ($t_p = 8/20\mu s$)	21	A
T_J	Operating Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

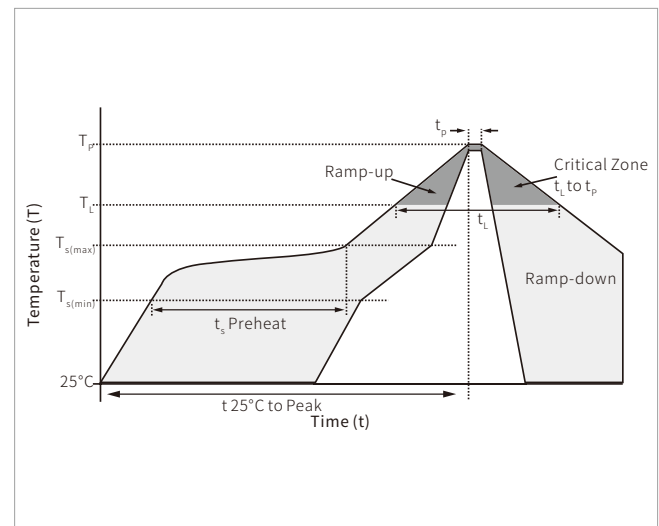
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				70	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 50\mu A$	85			V
I_R	Reverse Leakage Current	$V_{RWM} = 70V$			0.5	μA
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$			3	V
V_C	Clamping Voltage	$I_{PP} = 10A, t_p = 8/20\mu s$			9	V
V_C	Clamping Voltage	$I_{PP} = 21A, t_p = 8/20\mu s$			16	V
I_{PP}	Peak Pulse Current	$t_p = 8/20\mu s$			21	A
C_J	Off State Junction Capacitance	$V_R = 0V, f = 1MHz$ I/O-I/O		1		pF
C_J	Off State Junction Capacitance	$V_R = 0V, f = 1MHz$ I/O-GND		1.5		pF

CHARACTERISTIC CURVES

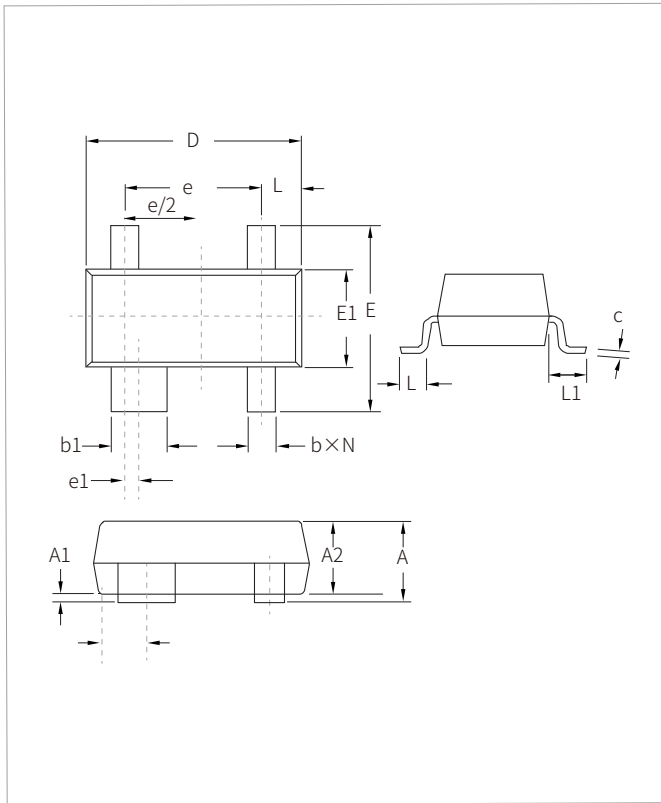


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

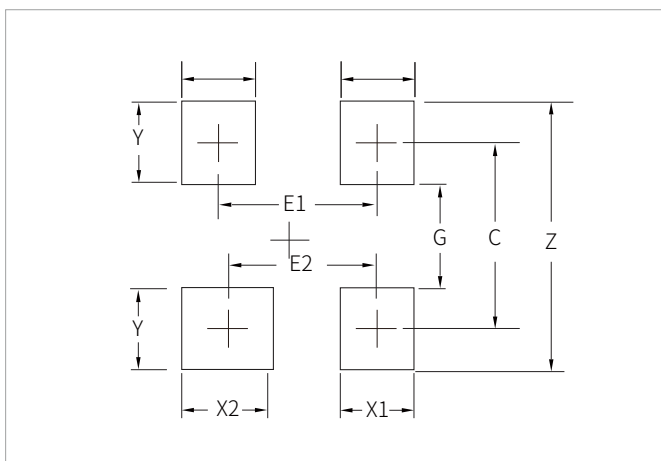


SOT-143 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.80	1.22	0.031	0.048
A1	0.013	0.15	0.000	0.008
A2	0.75	1.07	0.029	0.042
b	0.30	0.51	0.011	0.020
b1	0.76	0.94	0.029	0.037
c	0.06	0.20	0.002	0.008
D	2.80	3.04	0.110	0.120
E	2.10	2.64	0.082	0.104
E1	1.20	1.40	0.047	0.055
e	1.92BSC		0.075	
e1	0.20BSC		0.008	
L	0.40	0.60	0.015	0.024
L1	(0.54)		(0.021)	
N	4		4	

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
C	(2.2)	(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

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SESR70	SOT-143	3000PCS	7"

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By QR Code

Website



Wechat

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