

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed, Isolated Power Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 175°C Operating Temperature
- Isolated Version (Hot Case Versions Available – Contact Factory)
- Smaller Footprint than TO-25X package
- Weight: 0.95 g typ
- TX, TXV, and Space Level Screening Available^{2/}

A 3D perspective view of a dual-channel microfluidic chip. The chip consists of two parallel grey channels separated by a central wall. Each channel has a yellow reservoir at one end. The channels are connected to a common outlet at the other end. The chip is shown with a white substrate and a yellow top layer.

Yellow = Cathode

DOC



Solid State Devices, Inc.

14701 Firestone Blvd. * La Mirada, Ca 90638

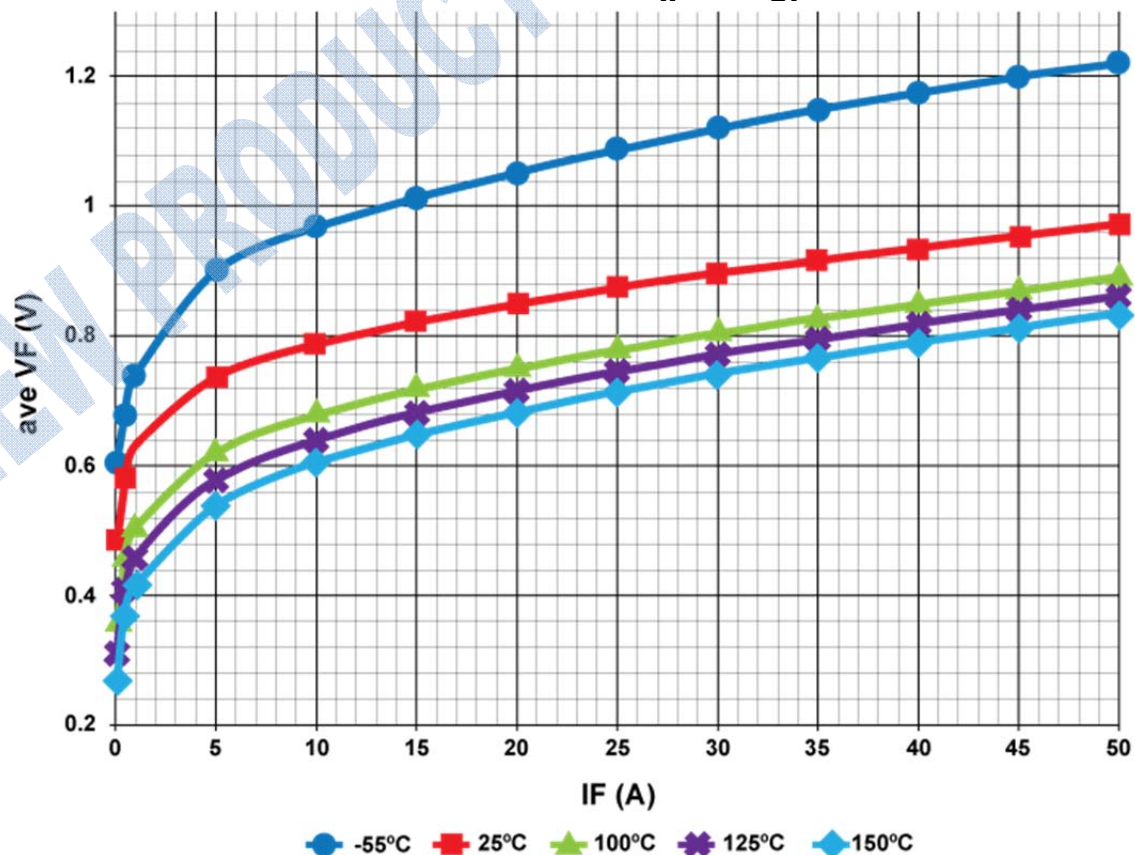
Phone: (562) 404-4474 * Fax: (562) 404-1773

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SED40HE300CT1i Series

ELECTRICAL CHARACTERISTICS (per leg)		Symbol	Typical	Maximum	Unit
Instantaneous Forward Voltage Drop ($I_F = 1 A_{DC}$, 300 - 500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F1}	0.74	-	V_{DC}
	$T_A = 25^\circ C$	V_{F2}	0.63	0.70	
	$T_A = 125^\circ C$	V_{F3}	0.46	0.55	
Instantaneous Forward Voltage Drop ($I_F = 5 A_{DC}$, 300 - 500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F4}	0.90	-	V_{DC}
	$T_A = 25^\circ C$	V_{F5}	0.74	0.80	
	$T_A = 125^\circ C$	V_{F6}	0.58	0.65	
Instantaneous Forward Voltage Drop ($I_F = 10 A_{DC}$, 300 - 500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F7}	0.97	-	V_{DC}
	$T_A = 25^\circ C$	V_{F8}	0.79	0.85	
	$T_A = 125^\circ C$	V_{F9}	0.64	0.72	
Instantaneous Forward Voltage Drop ($I_F = 20 A_{DC}$, 300 - 500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F10}	1.06	-	V_{DC}
	$T_A = 25^\circ C$	V_{F11}	0.85	0.92	
	$T_A = 125^\circ C$	V_{F12}	0.72	0.80	
Reverse Leakage Current (Rated V_R , 300 μ sec pulse minimum)	$T_A = 25^\circ C$	I_{R1}	5	50	μA
	$T_A = 100^\circ C$	I_{R2}	200	-	μA
	$T_A = 125^\circ C$	I_{R3}	0.6	5	mA
Junction Capacitance ($T_A = 25^\circ C$, $f = 1$ MHz)	$V_R = 5V$	C_{J1}	250	350	pF
	$V_R = 10V$	C_{J2}	185	-	pF

SED40HE300CTi (per leg)



NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

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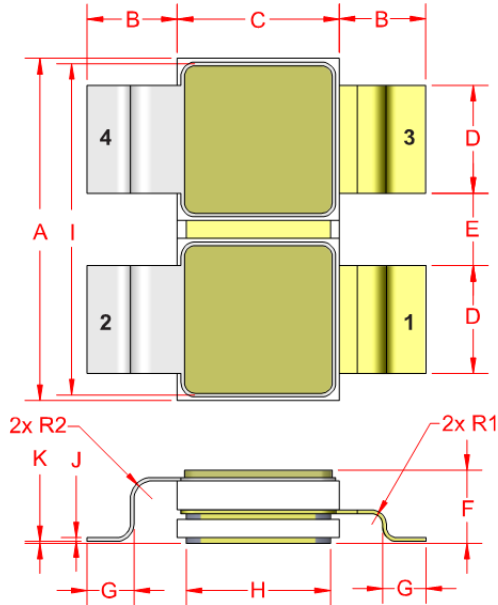


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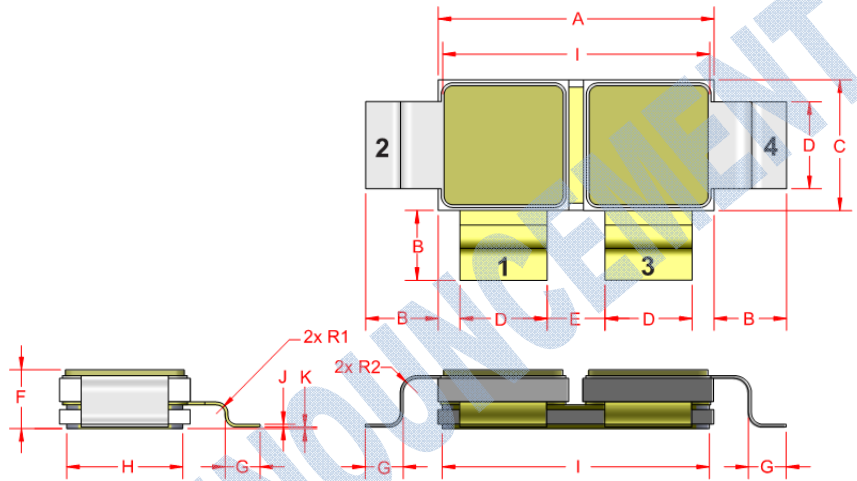
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SED40HE300CT1i Series

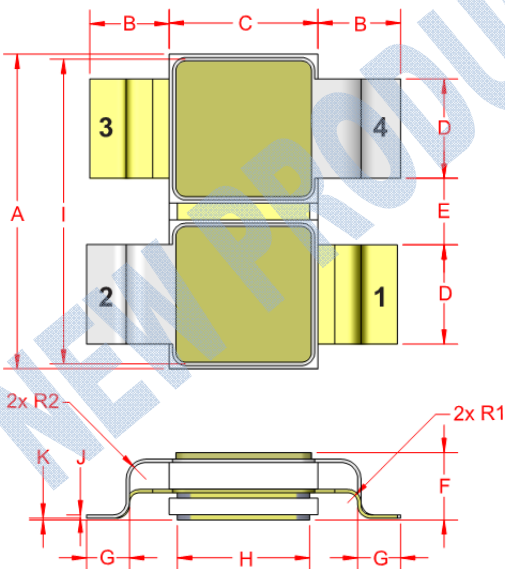
CASE OUTLINE: SED40HE300CT1i
Front Mount



CASE OUTLINE: SED40HE300CT2i
Side Mount



CASE OUTLINE: SED40HE300CT3i
Split Mount



DIMENSIONS

DIM	MIN	MAX
A	0.465	0.560
B	0.125	0.145
C	0.200	0.235
D	0.140	0.160
E	0.090	0.110
F	-	0.135
G	0.055	0.075
H	0.200	0.210
I (bottom Cu pad)	0.450	0.460
J	0.005	0.008
K	-0.002	0.008
R1	R 0.015 REF	
R2	R 0.025 REF	

PIN ASSIGNMENT

Pin 4 ● —|— ● Pin 3

Pin 2 ● —|— ● Pin 1

Pin 1 & Pin 3 tied together

Configuration	Pin 1 & Pin 3 (tied together)	Pin 2	Pin 4
Common Cathode (CT)	Cathode	Anode	Anode

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