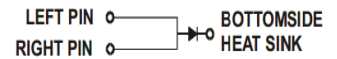
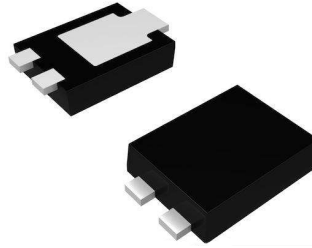


Schottky Barrier Rectifier in TO-277

Features

- Schottky barrier diodes
- Low forward voltage drop
- High junction temperature
- High forward surge current capability



Mechanical Data

- **Case:** TO-277 (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	CSB 15L40SG	CSB 15L45SG	CSB 15L50SG	CSB 15L60SG	CSB 15L80SG	CSB 15L100SG	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	45	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	40	45	50	60	80	100	V
Maximum average forward rectified current	$I_{F(AV)}$	15.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	250						A
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150						°C

Electrical Characteristics

($T_A = 25\text{ °C}$ unless otherwise specified)

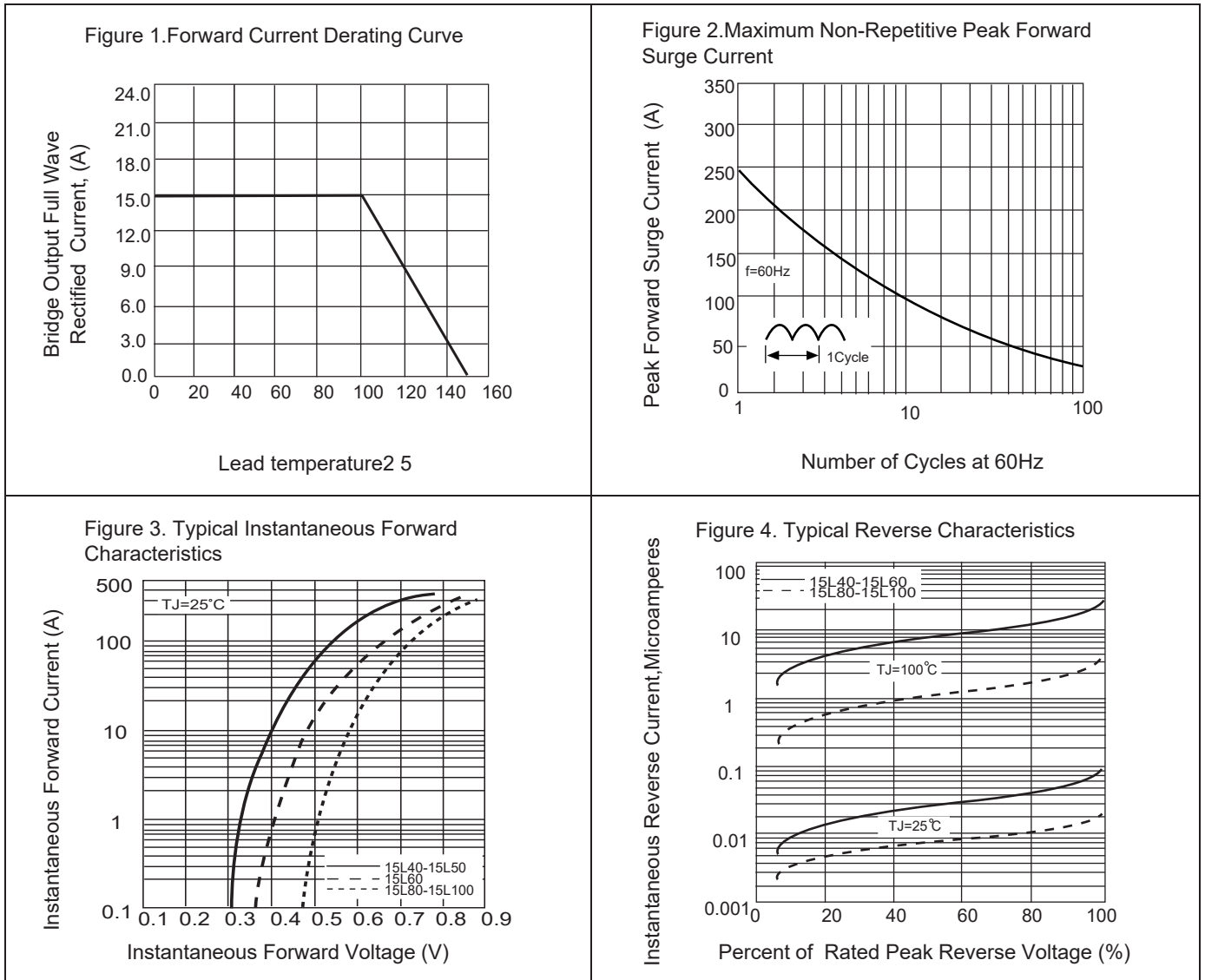
Parameter	Test Conditions	Symbol	CSB 15L40SG	CSB 15L45SG	CSB 15L50SG	CSB 15L60SG	CSB 15L80SG	CSB 15L100SG	Unit
Maximum instantaneous forward voltage $T_A=25\text{ °C}$	$I_F=2A$	V_F	0.35			0.4	0.45		V
	$I_F=15A$		0.48			0.55	0.70		
Maximum DC reverse current at rated DC blocking voltage	$T_A=25\text{ °C}$	I_R	0.5			0.2		mA	
	$T_A=125\text{ °C}$		50			20			

Thermal Characteristics

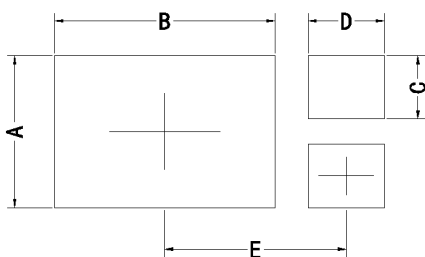
Parameter	Symbol	CSB 15L40SG	CSB 15L45SG	CSB 15L50SG	CSB 15L60SG	CSB 15L80SG	CSB 15L100SG	Unit
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	60.0						°C/W
Operating junction temperature range	T_J	-55 to +150						°C
Storage temperature range	T_{STJ}	-55 to +150						°C

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0×5.0mm copper pads

Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)

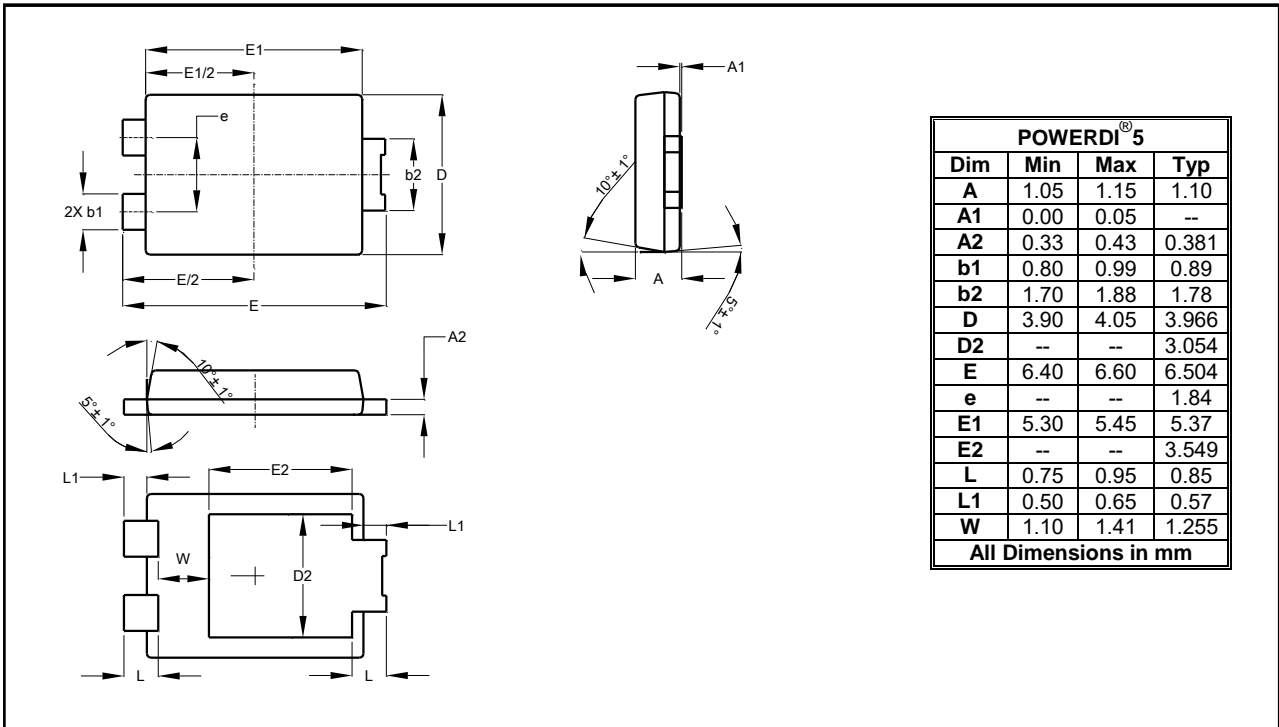


Suggested Pad Layout

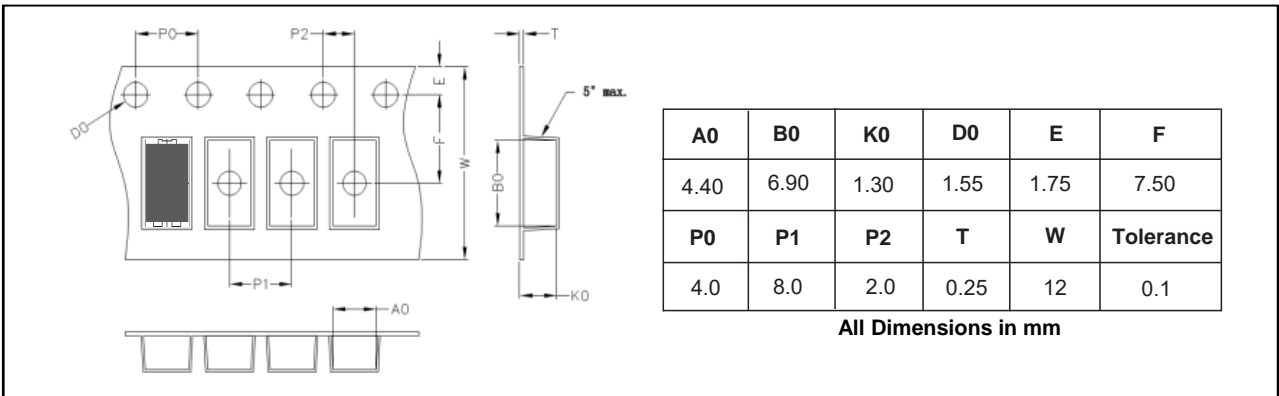


Symbol	Unit (mm)	Unit (inch)
A	3.60	0.142
B	5.35	0.211
C	1.50	0.059
D	1.85	0.073
E	4.30	0.169

Package Dimensions



Package information



Ordering information

Order code	Package	Packaging option	Reel size	Base quantity	Packaging specification
CSB15LxxxSG	TO-277	Tape and reel	13'	5000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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