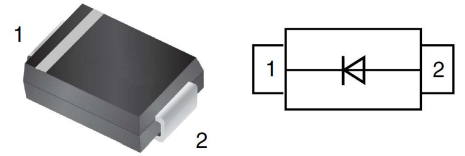


Surface Mount Ultrafast Plastic Rectifier in DO-214AB/SMC

Features

- Glass passivated pellet chip junction
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low switching losses, high efficiency
- High forward surge capability



Mechanical Data

- **Case:** JEDEC DO-214AB(SMC)(molded plastic)
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, and telecommunication.

Absolute Maximum Ratings

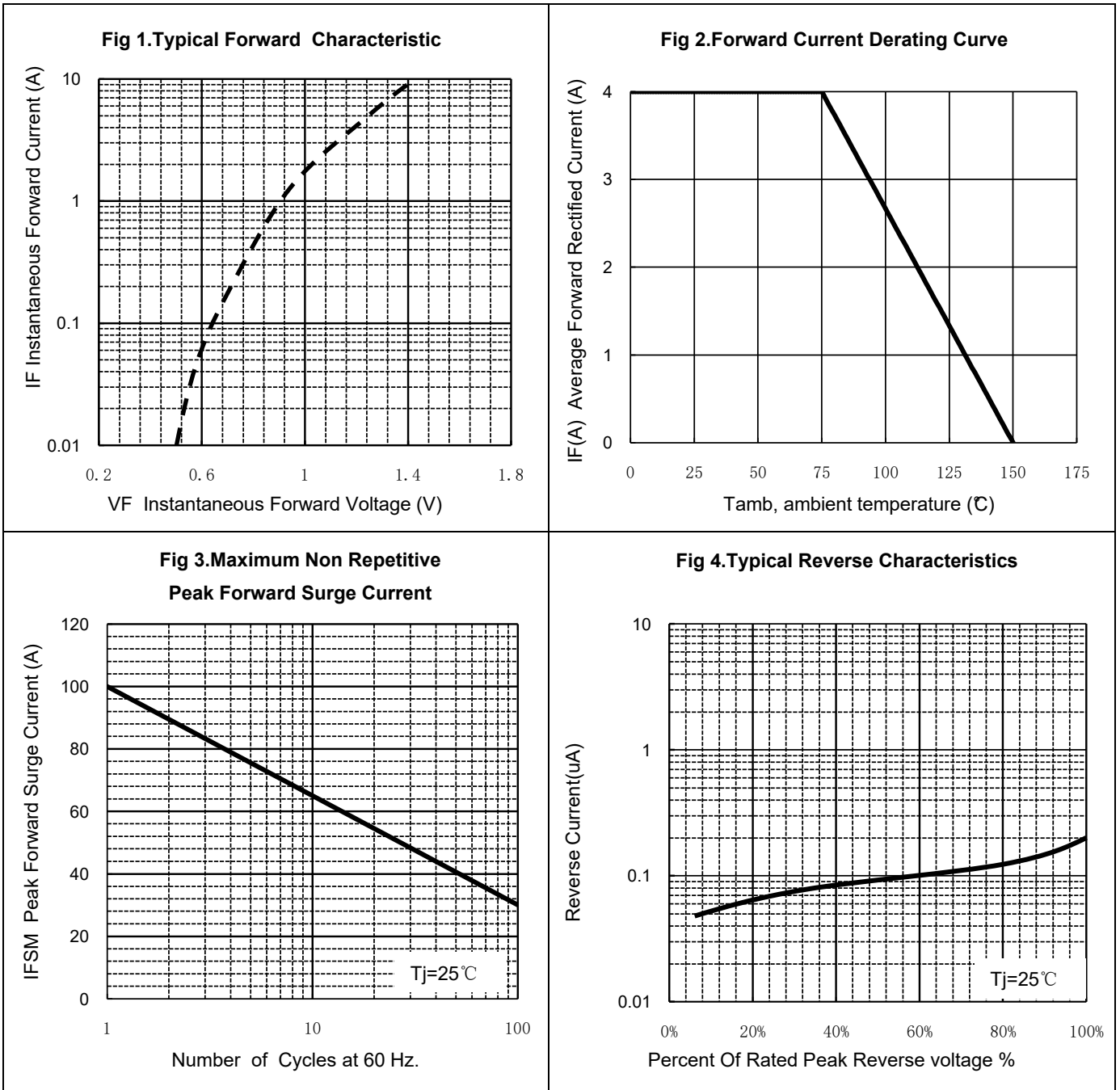
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	MURS440	MURS460	Unit	
Device marking code		MURS440	MURS460		
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	V	
Maximum RMS voltage	V_{RWM}	280	420	V	
Maximum DC blocking voltage	V_{DC}	400	600	V	
Maximum average forward rectified current	$I_{F(AV)}$	4.0		A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	100		A	
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		°C	
Maximum instantaneous forward voltage	$I_F = 4.0 \text{ A}$	$T_J = 25 \text{ °C}$	$V_F^{(1)}$	1.28	V
Maximum instantaneous reverse current at rated DC blocking voltage		$T_J = 25 \text{ °C}$	$I_R^{(1)}$	5	μA
		$T_J = 125 \text{ °C}$		100	
Maximum reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$	t_{rr}		50	ns
Typical thermal resistance (Note 1)		$R_{\theta JA}$		65	°C/W
Type junction capacitance	$VR=4.0V, f=1MHz$	C_J		150	pF

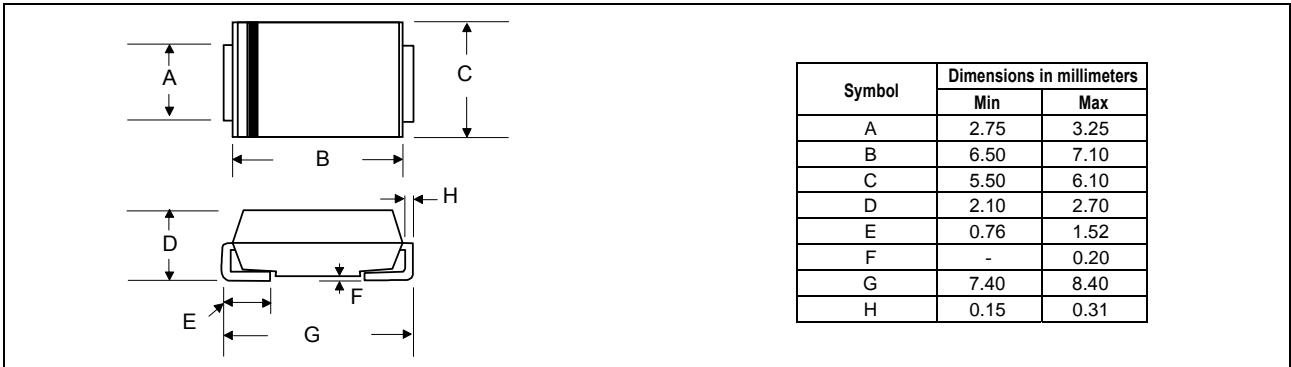
Note

⁽¹⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

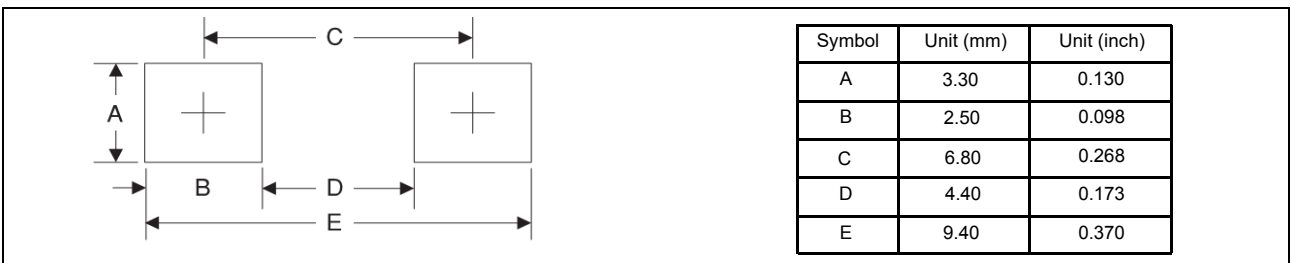
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



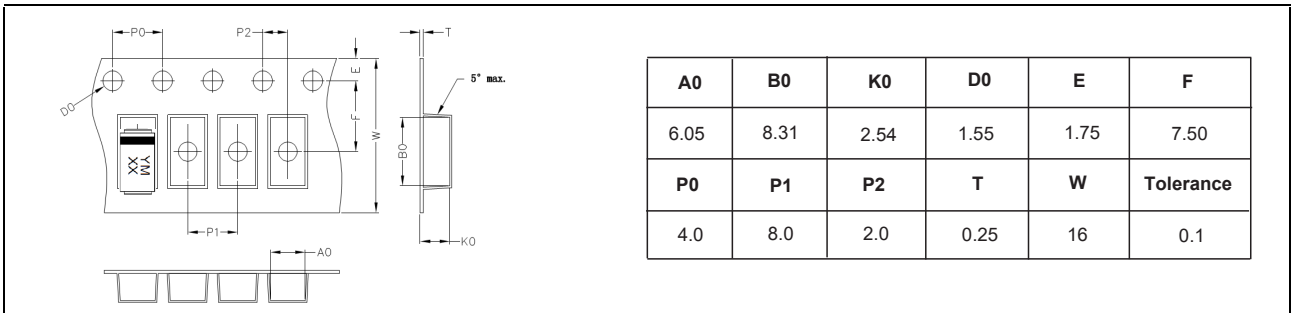
Package Dimensions



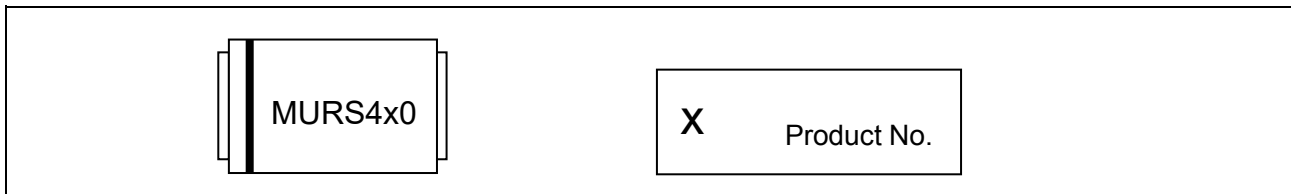
PAD Dimensions



Packing Information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MURS440 thru MURS460	DO-214AB/SMC	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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