

SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 200 to 600 Volts Forward Current - 3.0 Amperes

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Super fast switching for high efficiency
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds at terminals

Mechanical Data

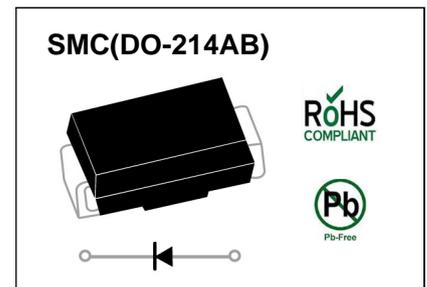
- Case: DO-214AB molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.007 ounce, 0.25 grams

Specification

Maximum Rating And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.



	SYMBOLS	MURS320	MURS330	MURS340	MURS360	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	200	300	400	600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length	I_{AV}	3.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80				A
Maximum instantaneous forward voltage at 3.0A	V_F	0.875	1.25			V
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	5.0 100.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	25	50			ns
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0				$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150				$^\circ C$

Note: 1. Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Ratings and characteristic curves MURS320 thru MURS360

FIG. 1- FORWARD CURRENT DERATING CURVE

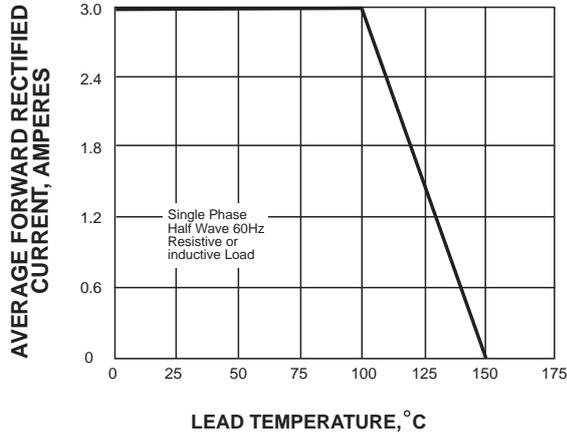


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

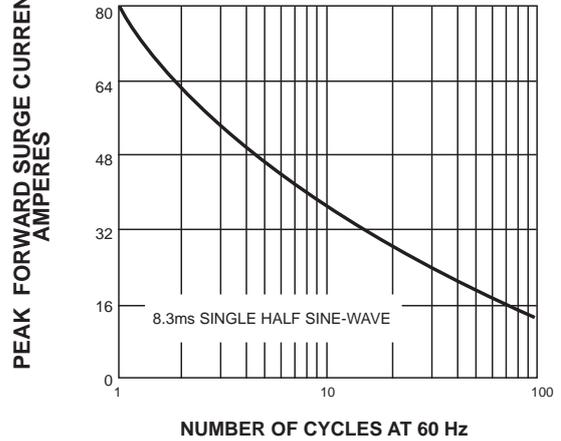


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

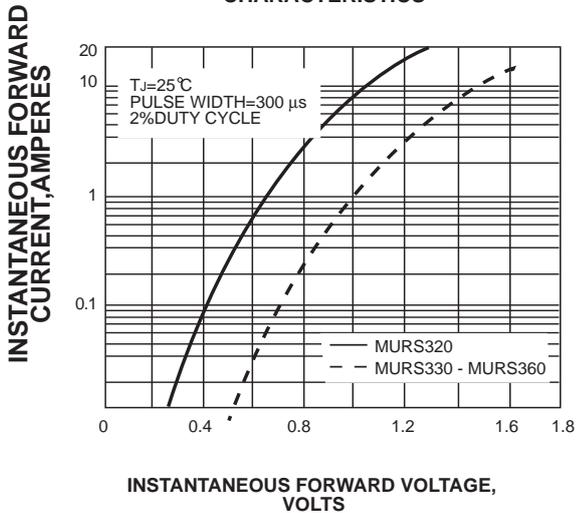
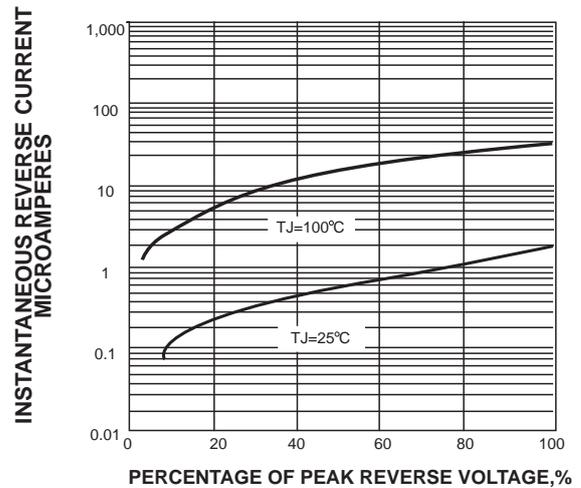


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Marking and packing illustration

1、Marking



SYMBOL	Explanation
A	Product Name

2、Packaging



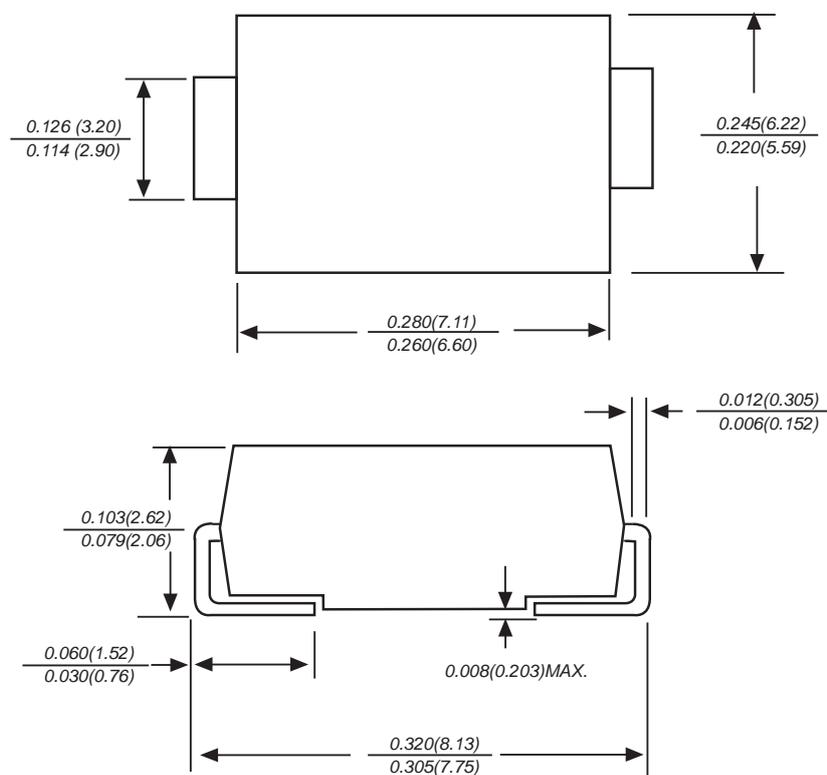
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYMBOL	SMC (DO-214AB)	ITEM	SYMBOL	SMC (DO-214AB)
Carrier width	A	6.15(0.242) MAX	Carrier depth	K	2.54(0.100) typ
Carrier length	B	8.41(0.331) MAX	Punch hole pitch	P	8.00(0.315) typ
Sprocket hole	d	Ø1.55(0.061) typ	Sprocket hole pitch	P0	4.00(0.157) typ
Keel outer diameter	D	330.0(13.0) typ	Embossment center	P1	2.00(0.079) typ
Keel inner diameter	D1	74.0(2.913) MIN	Overall tape thickness	I	0.25(0.010) typ
Feed hole diameter	D2	13.0(0.512) typ	Tape width	W	16.0(0.430) typ
Sprocket hole position	J	1.75(0.069) typ	Keel width	W1	16.5(0.650) MIN
Punch hole position	H	7.50(0.295) typ			

3、Ordering Information

Part Number	Compliance	Case	Packaging
SSXX	Standard	SMC	3000/Tape & Reel

Dimension

SMC(DO-214AB)



Dimensions in inches and (millimeters)

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