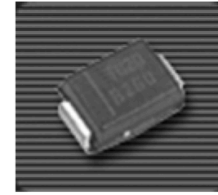
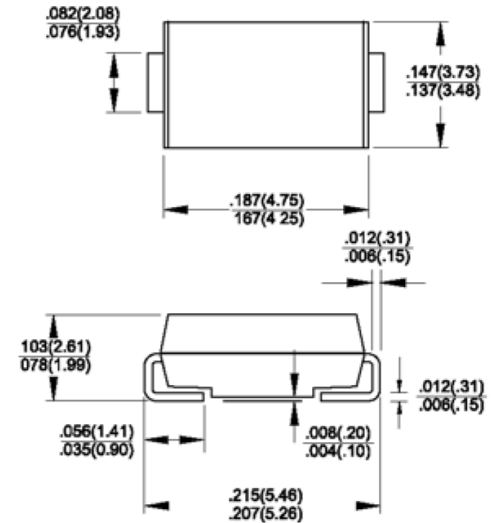


Features

- ◆ For surface mounted applications
- ◆ Metal-Semiconductor junction with guardring
- ◆ Epitaxial construction
- ◆ Very low forward voltage drop
- ◆ High current capability
- ◆ Plastic material has UL flammability classification 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ AEC-Q101 Qualified



DO-214AA (SMB)



Mechanical Data

- ◆ Case : JEDEC DO-214AA(SMB) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.003 ounce, 0.093 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	ASK27	ASK28	ASK29	ASK2B	Units
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	70	80	90	100	Volts
Maximum average forward rectified current @ $T_L = 100^\circ\text{C}$	$I_{(AV)}$	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0				Amps
Maximum forward voltage at 2.0A DC @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$	V_F	0.79 0.69				Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$	I_R	0.5 15				mA
Typical junction capacitance (Note 1)	C_J	75				pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	15				$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +125				$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150				$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

FIG.1 - FORWARD CURRENT DERATING CURVE

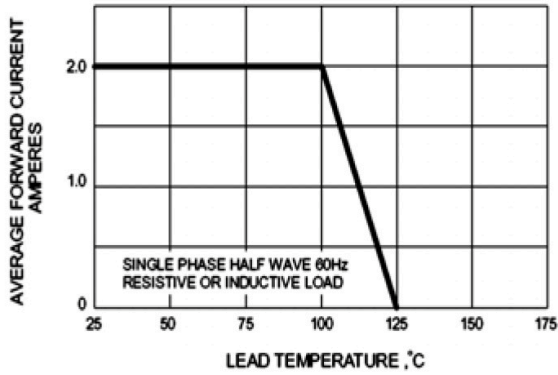


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

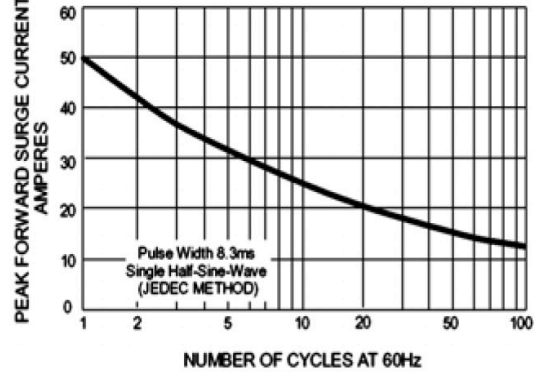


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

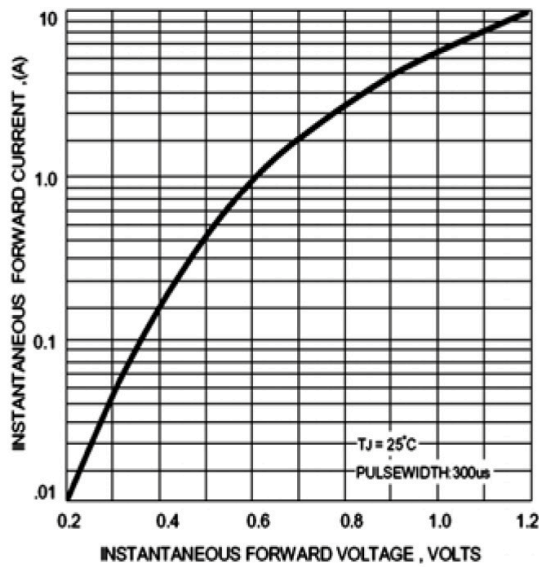


FIG.4 - TYPICAL JUNCTION CAPACITANCE

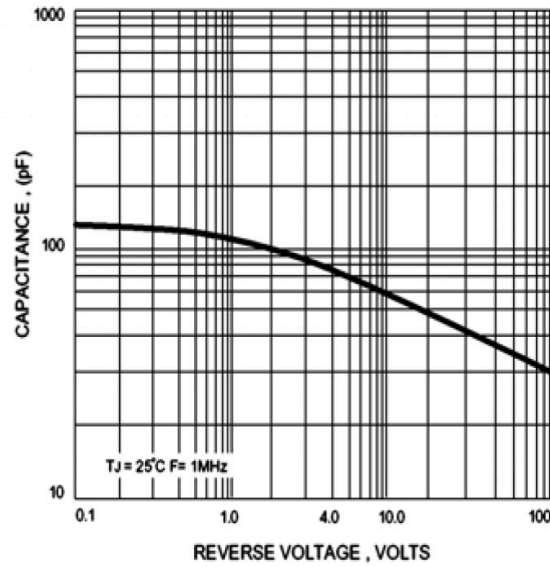
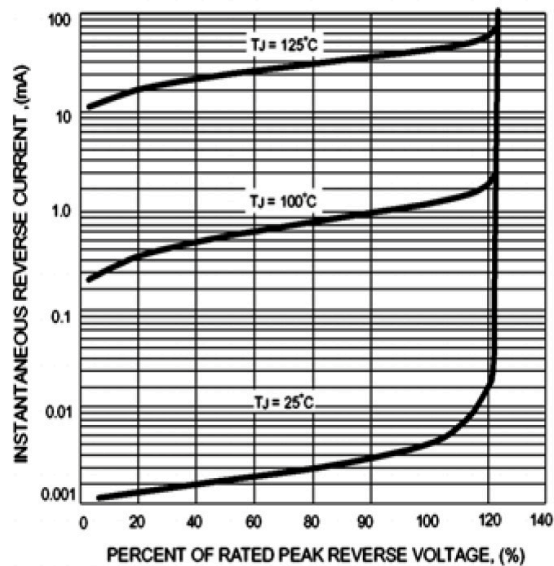
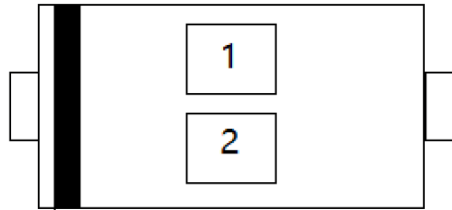


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



MARKING INFORMATION



1. Date code (See below Annual code and Monthly code)
2. For example: ASK2B

Annual code

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Code	9	A	B	C	D	E	F	G	H	J	K	0

Monthly code

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

HISTORY

Revised date	Content	Version#	Remark
	Original		
Jan-16-2017	Add marking spec	Rev.B	