

General Purpose Diode

Reverse Voltage - 2000 V

Forward Current - 1 A

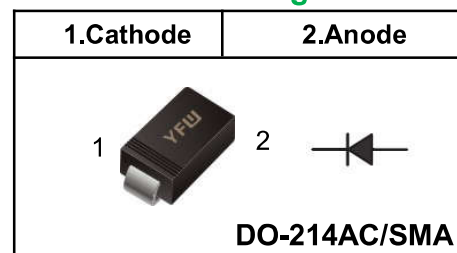
Features

- ◆The plastic package carries UL Flammability Classification 94V-0
- ◆For surface mounted applications
- ◆Low reverse leakage
- ◆Built-in strain relief, ideal for automated placement
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed:260℃/10 seconds at terminals

Mechanical Characteristics

- ◆Case: SMA (DO-214AC) package molded plastic body over passivated chip
- ◆Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ◆Polarity: Color band denotes cathode end
- ◆Mounting Position: Any

Pinning



Electrical Parameters

Parameter	Symbols	M20	Units
Maximum repetitive peak reverse voltage	V_{RRM}	2000	V
Maximum RMS voltage	V_{RMS}	1400	V
Maximum DC blocking voltage	V_{DC}	2000	V
Maximum average forward rectified current	I_{AV}	1	A
Peak forward surge current (NOTE1)	I_{FSM}	30	A
Maximum instantaneous forward voltage at 1A	V_F	1.1	V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25\text{ }^{\circ}\text{C}$ I_R	5	μA
	$T_A=100\text{ }^{\circ}\text{C}$ I_{RT}	100	μA
Typical junction capacitance (NOTE 2)	C_J	15	pF
Typical Thermal Resistance Junction to Ambient (NOTE3)	$R_{\theta JA}$	85	$^{\circ}\text{C/W}$
Typical Thermal Resistance Junction to Lead(NOTE3)	$R_{\theta JL}$	28	$^{\circ}\text{C/W}$
Operating Temperature Range	T_J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	$^{\circ}\text{C}$

Note1: 8.3ms single half sine-wave superimposed on rated load

Note2: Measured at 1MHz and applied reverse voltage of 4.0V DC.

Note3: PCB. mounted with 5×5mm copper pad areas

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

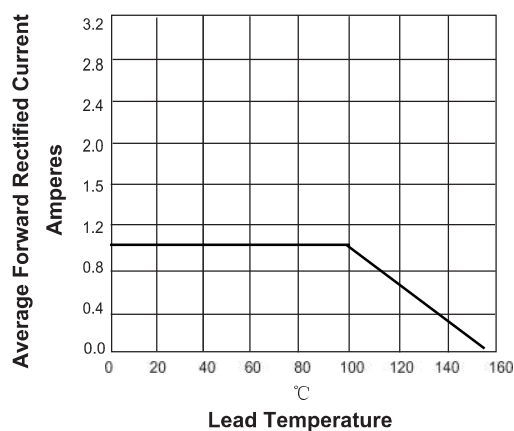


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

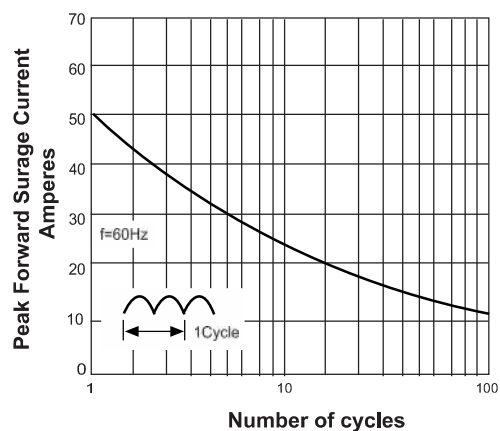


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

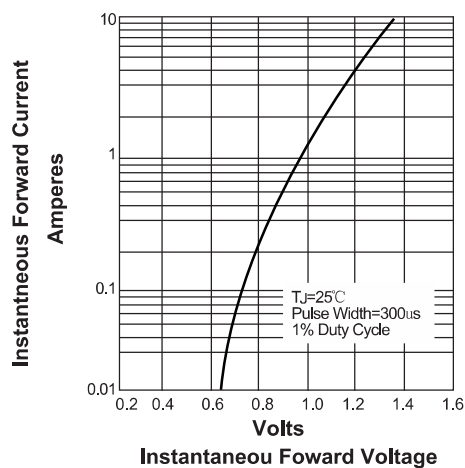
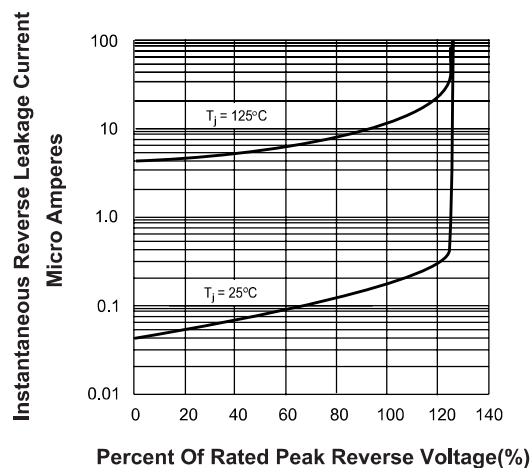


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

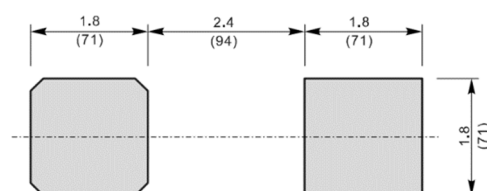
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

DO-214AC SMA

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H _E	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{(\text{mil})}$

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