

Features

Glass passivated junction
Surface mount DO-214AB
Bi-directional or Un-directional
Very low clamping voltage
High temperature soldering: 260°C/10 seconds at terminals
Continued current transient suppressor
RoHS compliant
6.6KW peak pulse power capability on 10/1000µs waveform
Operating Junction and Storage Temperature Range is -55°C to 150°C
AEC-Q101

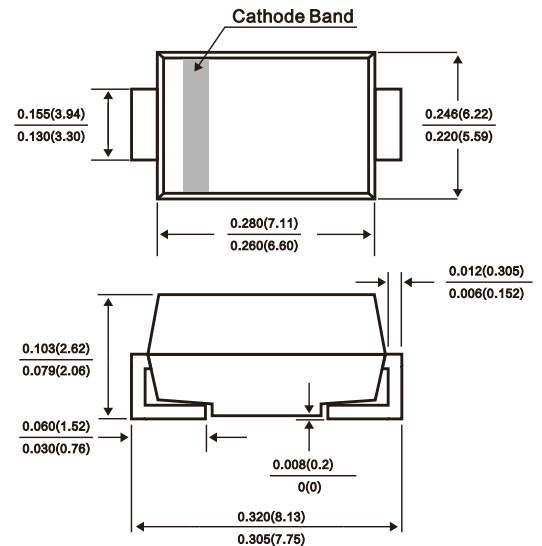
IEC Compatibility

ISO 16750-2 Test A 12v System (87V 2Ω 150ms 10c)

Applications

Auto powers system
Can-bus
ABS powers
Car audio and video
Automotive instrument
Bluetooth
Car GPS

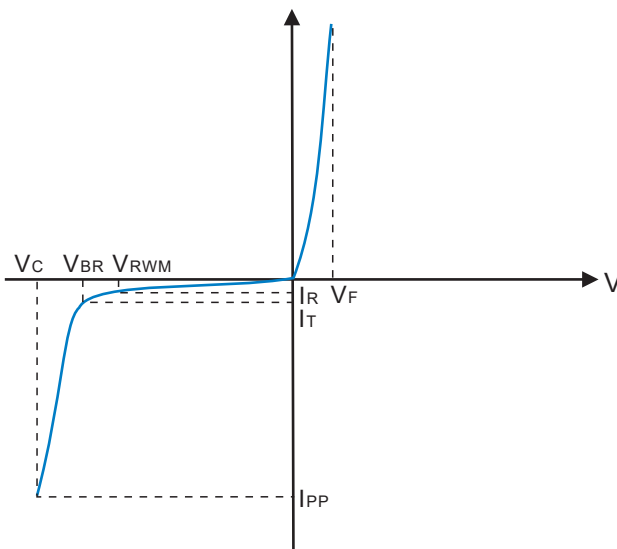
SMC(DO-214AB)



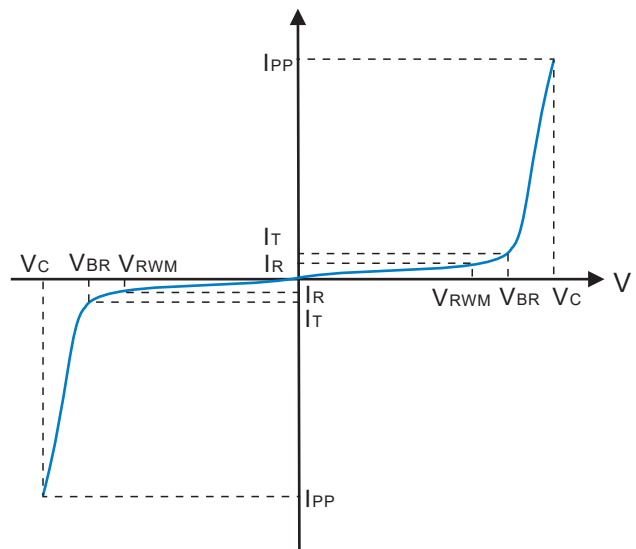
Dimensions in inches and (millimeters)

I-V Curve Characteristics

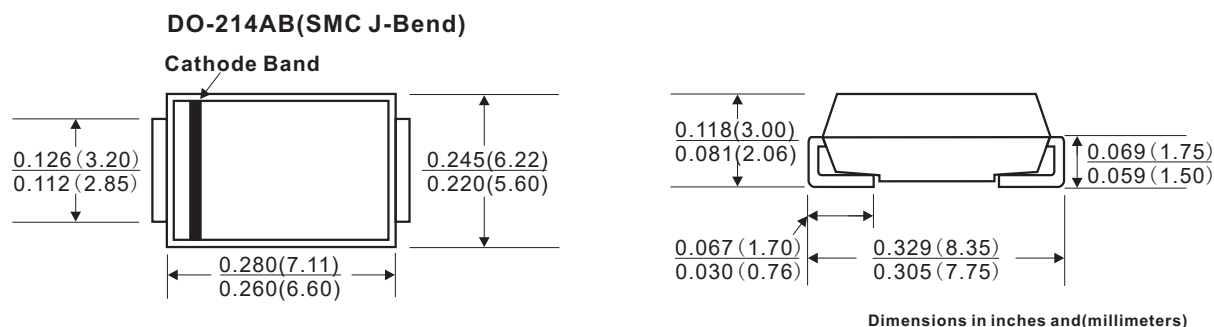
Uni-directional



Bi-directional



Dimensions (DO-214AB)



Electrical Characteristics

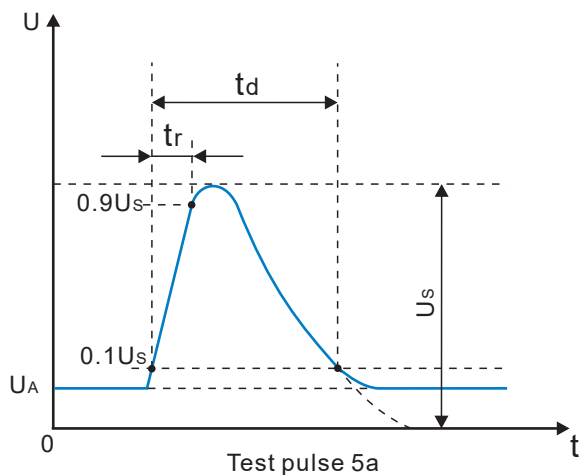
***Stand for commonly used models

PKA Part Number		Device Marking Code		Stand-Off Voltage	Reverse Leakage @VRWM	Breakdown Voltage @IT		Test Current	Max. Clamping Voltage @Ipp 10/1000μs	
UNI-Polar	BI-Polar	UNI	BI	VRWM(V)	IR(μA)	VBR(V)Min.	VBR(V)Max.	IT(mA)	Vc(V)	Ipp(A)
PKA15A	PKA15CA	6PES	6BES	15	100	16.7	18.5	1	24.4	270.4
PKA16A	PKA16CA	6PET	6BET	16	50	17.8	19.7	1	26.0	253.8
PKA20A	PKA20CA	6PEW	6BEW	20	10	22.2	24.5	1	32.4	203.7
PKA22A	PKA22CA	6PEX	6BEX	22	2	24.0	26.9	1	35.5	185.9
* PKA26A	PKA26CA	6PFE	6BFE	26	2	28.9	31.9	1	42.1	156.8
PKA30A	PKA30CA	6PFK	6BFK	30	2	33.3	36.8	1	48.4	136.4
PKA33A	PKA33CA	6PFM	6BFM	33	2	36.7	40.6	1	53.3	123.8
* PKA36A	PKA36CA	6PFP	6BFP	36	2	40.0	44.2	1	58.1	113.6
PKA43A	PKA43CA	6PFT	6BFT	43	2	47.8	52.8	1	69.4	95.1
PKA60A	PKA60CA	6PGK	6DGK	60	2	66.7	73.7	1	96.8	68.2

Notes :

For bidirectional type having Vrwm of 18 volts and less, the IR limit is double.

Test ISO 16750-2 Test A



Parameter	12V System	24V System
Us	79V to 101V	151V to 202V
Ri	0.5 Ω to 4 Ω	1 Ω to 8 Ω
td	40ms to 400ms	100ms to 350ms
tr	$(10^{0}_{-5})ms$	

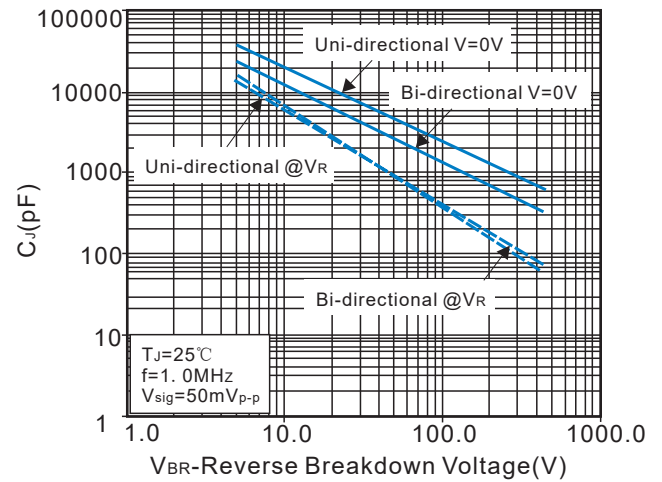
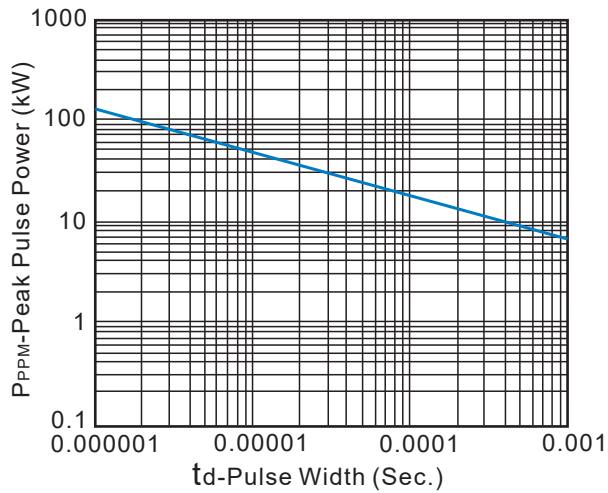


Fig.4 Maximum Non-repetitive Forward Surge

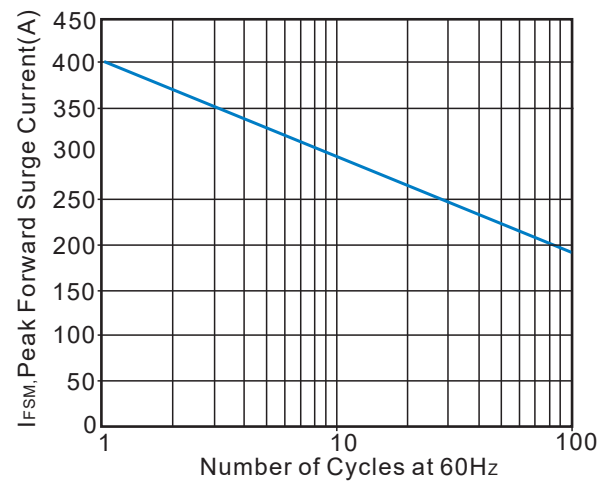
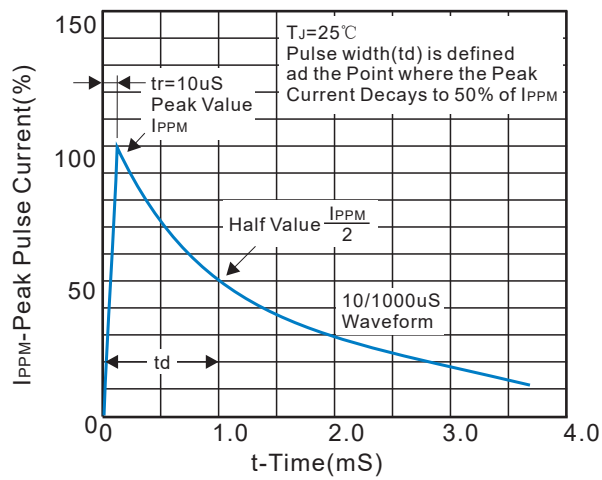
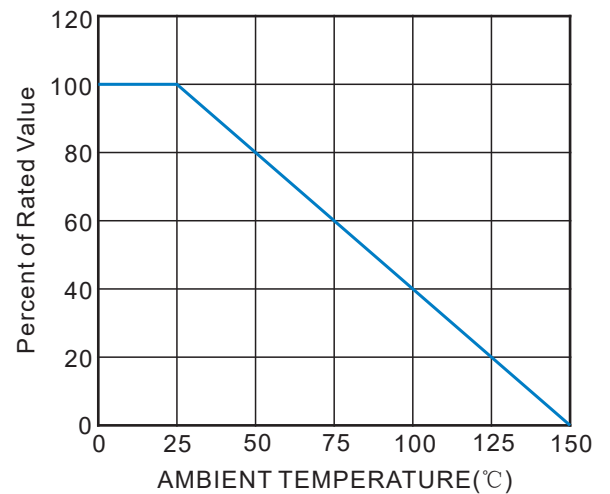
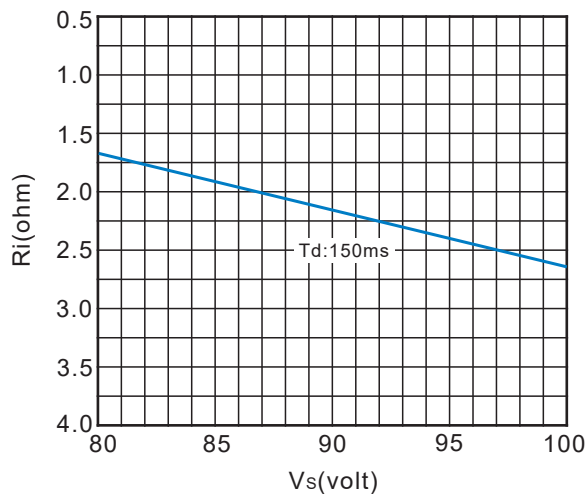


Fig.5 Ri-Vs chart for ISO-16750-2 Test A : 12V System

Fig.6 Power Derating Cure



Recommended Soldering Conditions

Recommended Conditions

Reflow Condition		Pb-Free assembly (see Fig.1)
Pre Heat	-Temperature Min($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time(Min to Max)(t_s)	60-180secs
Average ramp up rate (Liquidus Temp(T_L) to peak)		3°C/sec.Max.
$T_{s(max)}$ to T_L -Ramp-up Rate		3°C/sec.Max.
Reflow	-Temperature(T_L)(Liquidus)	+217°C
	-Temperature(t_L)	60-150secs
Peak Temp(T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp(t_P)		30 secs.Max.
Ramp-down Rate		6°C/sec.Max.
Time 25°C to Peak Temp(T_P)		8 min.Max.
Do not exceed		+260°C

Reflow Soldering

