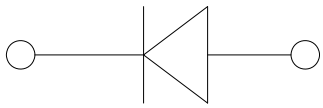
Plastic High Voltage Rectifier





Features

- VR 2KV
- IO 0.5A
- Glass passivated chip junction
- High surge current capability

Mechanical Data

- **Package**: DO-204AL(DO-41)

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:**Color band denotes cathode end

■Maximum Ratings (Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	EM520
Device marking code			EM520
Maximum Repetitive peak reverse voltage	VRRM	V	2000
Maximum RMS Voltage	VRMS	V	1400
Maximum DC Blocking Voltage	VDC	V	2000
Average Forward Current @60Hz sine wave, Resistance load, Ta =90℃	$I_{F(AV)}$	A	0.5
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	20
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			40
Current squared time @1ms≤t8.3≤ms Tj=25℃，Rating of per diode	I^2t	A^2s	1.66
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	4.5
Storage Temperature	Tstg	℃	-55 ~ +150
Junction Temperature	Tj	℃	-55 ~ +150

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	EM520
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=0.5A	2
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	T_j=25℃	5
			T_j=125℃	50

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	EM520
Typical Thermal Resistance	$R_{\theta J-A}$	℃/W	60

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
EM520	C1	Approximate 0.27	Approximate 1000	1000	50000	Bulk

■ Characteristics (Typical)

FIG.1: Io-Ta Curve

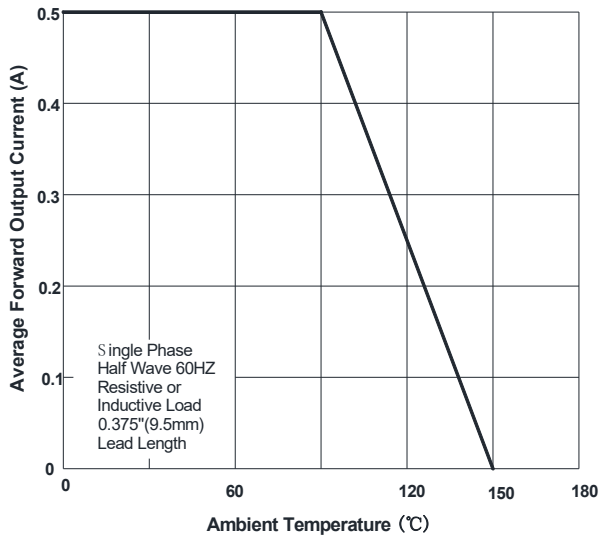


FIG.2: Forward Surge Current Capability

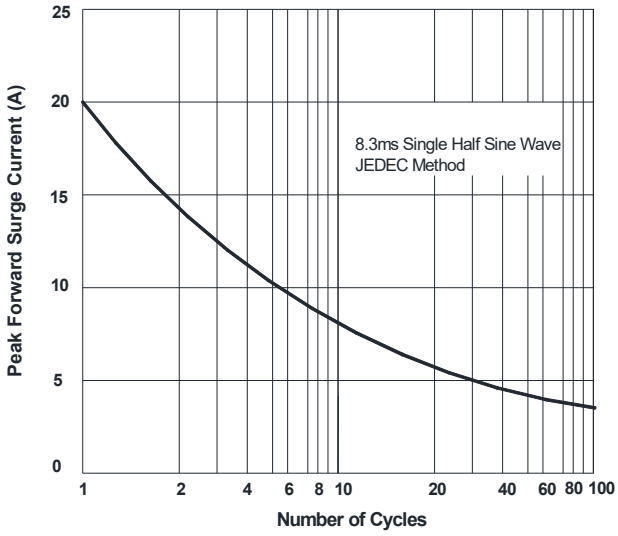


FIG.3: Forward Voltage

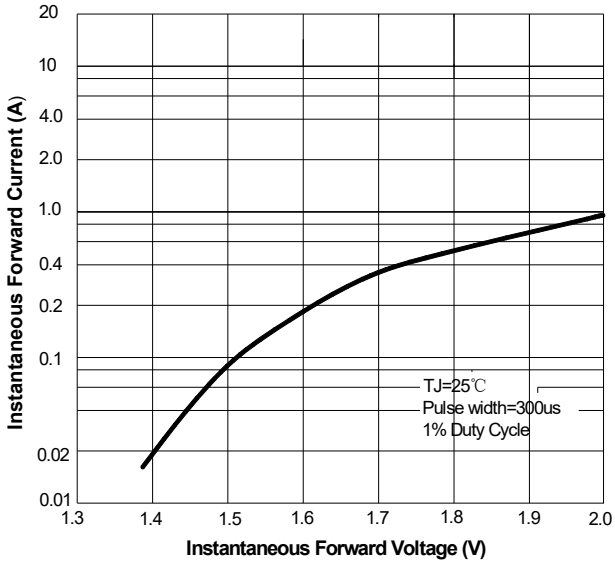
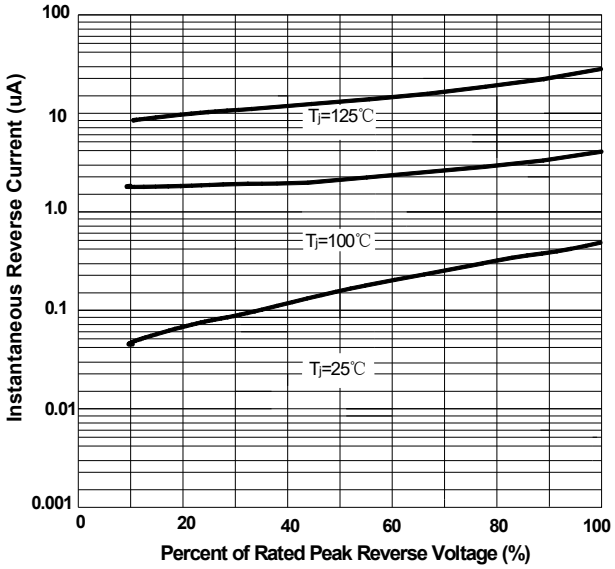
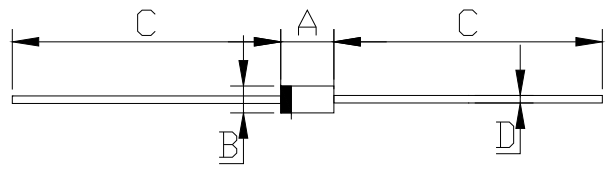


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions

DO-204AL(DO-41)



Dimensions in millimeters

DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86

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