

VOLTAGE RANGE: 2500V - 5000V
CURRENT: 0.2 A

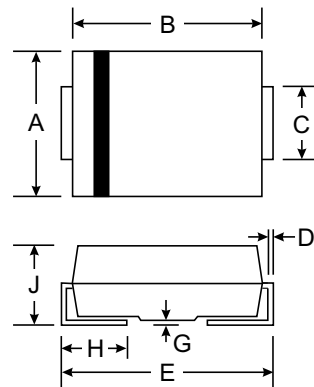
Features

- Construction utilizes void-free
- molded plastic technique
- Low reverse leakage
- High forward surge current capability



Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	RE2500A	RE3000A	RE4000A	RE5000A	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	2500	3000	4000	5000	V
Maximum RMS voltage	V _{RMS}	1750	2100	2800	3500	V
Maximum DC blocking voltage	V _{DC}	2500	3000	4000	5000	V
Maximum average forward rectified current 0.375”(9.5mm) lead length (see fig.1)	I _(AV)	0.2				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0				A
Maximum instantaneous forward voltage at 0.2 A	V _F	3.0	4.0	5.0		V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 50				μA
Typical junction capacitance (NOTE 1)	C _J	15.0				pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0				°C/W
Operating junction and storage temperature range	T _J T _{STG}	-65 to +175				°C

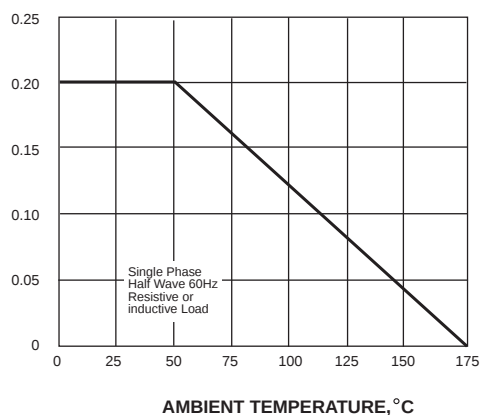
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES RE2500A THRU RE5000A

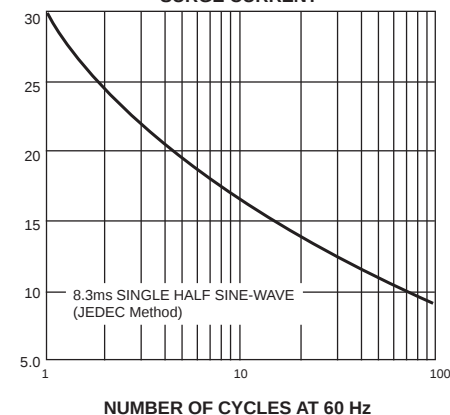
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



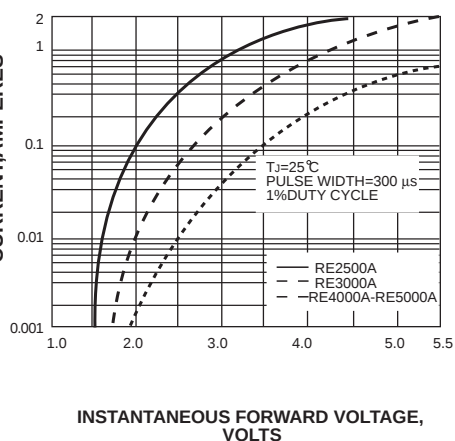
PEAK FORWARD SURGE CURRENT,
AMPERES

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



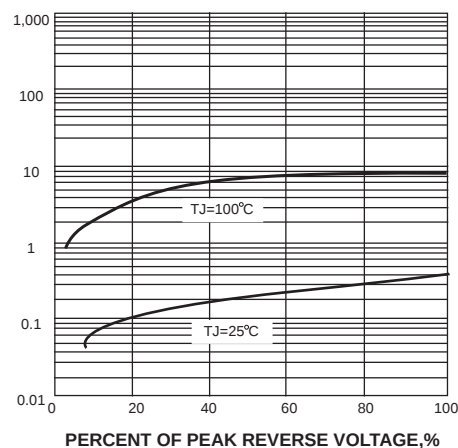
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



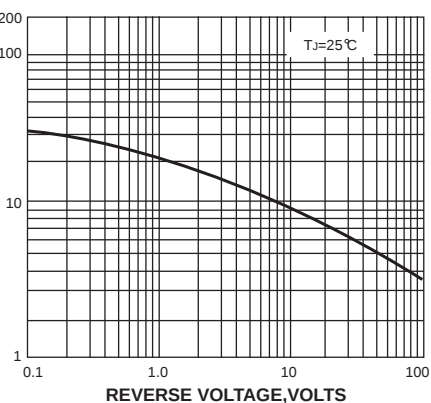
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

